

FO Nov 1000 | 1486 (October Water VAv | Avender, VA 2018) Tel 57(23) 7100 | FAX 57(23) 2300



VADEQ-NRO

January 20, 2010

Ms. Susan Mackert Water Permit Writer Senior Department of Environmental Quality Northern Virginia Regional Office 13901 Crown Court Woodbridge, Virginia 22193

Re: North Spring WWTP VPDES (VA0067938) Permit Application and Capacity Re-Rating

Dear Ms. Mackert:

As a follow-up to the January 14 and 15, 2009 electronic copies of the revised VPDES permit renewal and the draft re-rating report, please find the hard copies of these documents for the North Spring Behavioral Health Center WWTP attached. As you will see in the re-rating report, Loudoun Water believes that the facility is capable of treating 16,000 gpd with its current configuration and requests that the permit be changed to 16,000 gpd. We understand that the concentration limits will be correspondingly decreased to assure loading to the stream is not increased. If you have any questions or comments, please do not hesitate to call.

Sincerely,

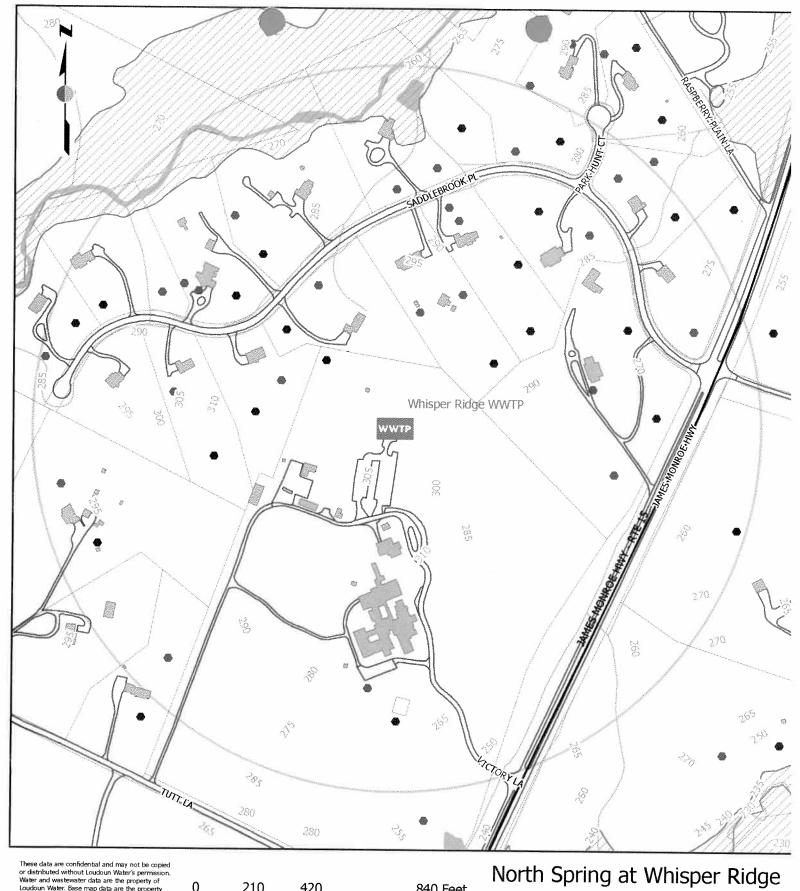
Todd A. Danielson, P.E., BCEE Manager of Community Systems

cc: Scott Zeiter (via email)

Attachments (2)

FORM	OFDA					MATION	I. EPA I.D. N	UMBER			
GENERAL	WELTH	Co.	nsoli	dated	Permits P		F	1 1 1 -1 -1	N 24 1	ar a	D
	LITEMS	11111	T	ai in	tructions	before starting.)		NERAL INSTR		ONS	13 14 15
I. EPA L.D	NUMBER	1/////	/	/	//	1/////	it in the des	ted label has b ignated space.	Review	v the	inform-
III. FACIL	TY NAME	1/////	/	1	//	1/////	through it a	ly; if any of i	correct	data	in the
. FACILI	2111	1/////	/	/	11	1/////	the preprint	fill—in area bel ed data is abse	nt (the	e area	to the
V. MAILIN	A DDRESS	PLEASE PLA	CĘ	LA	BEL IN	THIS SPACE	that should	label space lis appearl, please	prov	ide it	in the
++	444	1////	/	1	11,	111111	complete an	in area(s) belo d correct, you	need	not co	omplete
1 1		/////	/	/	11,	1/////	items 1, 111 must be co	, V, and VI (mpleted regard	except less).	VI-E	3 which plete all
VI. FACIL	TION /		1	/	1/1	1/////	the instruct	label has been ions for deta	iled i	tem	descrip-
111	1///		1	/	1/1	1/////	which this de	or the legal at stails collected.	thoriz	ation	s under
II. POLLUT	ANT CHARACTER	ISTICS								. 0	
INSTRUC	TIONS: Complete A	through J to determine w	heth	er yo	u need to	submit any permit application	forms to the l	PA. If you ans	wer "y	es" to	any
if the supp	demental form is att	tached. If you answer "no"	to ea	ach q	uestion, y	e parenthesis following the ques ou need not submit any of thesi	e forms. You r	nay answer "no	" if yo	ur act	lumn
is excluded	from permit require	ments; see Section C of the	instr	uctio	ns. See also	o, Section D of the instructions	for definition	of bold-faced	terms.	8	·
	SPECIFIC QUE	STIONS	YES		FORM ATTACHED	SPECIFIC Q	UESTIONS	1 1 1 1 1 1	YES	NO ,	FORM ATTACHED
		owned treatment works				B. Does or will this facility (include a concentrated a					
(FORM		ge to waters of the U.S.?	X		Х	aquatic animal production discharge to waters of the	facility which	h results in a		X	
		rently results in discharges	16	17 X	14	D. Is this a proposed facility	fother than to	nose described	ęs	20	21
	above? (FORM 2C)	er than those described in	11	, A	- 14	in A or B above) which waters of the U.S.? (FORM	4 2D)	- VSIL/5 /	25	X 24	27
E. Does o	r will this facility to ous wastes? (FORM 3	treat, store, or dispose of		x		 F. Do you or will you inject municipal effluent below 	the lowermos	t stratum con-		x	
0-0			21	29	30	taining, within one quar underground sources of dr	ter mile of the inking water?	he well bore, (FORM 4)	31	^	33
		t this facility any produced are brought to the surface				H. Do you or will you inject	at this facility	fluids for spe-	1	72	- 12
in conn	ection with conventi	ional oil or natural gas pro- for enhanced recovery of		x		cial processes such as min process, solution mining	of minerals, is	situ combus-		x	
oil or n		fluids for storage of liquid	24	35	24	tion of fossil fuel, or reco (FORM 4)	overy of geoth	ermal energy?	- 1	3.0	
		stationary source which is categories listed in the in-				J. Is this facility a proposed NOT one of the 28 indu				-	
		potentially emit 100 tons stant regulated under the		X		instructions and which wi per year of any air polluta	ill potentially	emit 250 tons		x	
	Air Act and may at tent area? (FORM 5)	ffect or be located in an	40	SAIC	ef 41 e.c.	Air Act and may affect or area? (FORM 5)			43	44	145 TURN
III. NAME O	F FACILITY										
1 SKIP	orth Spring B	ehavioral Healthca	ıre								
IV. FACILI	TY CONTACT		ES AT-	116 (24)				The CHILL MARKET NA	45	7	1300
		A. NAME & TITLE (last, fir	3-37/	title.		В.	PHONE farea	code & no.)	Ellis P	i ay	
	r, J. Scott, Ch	ief Executive Office	er			703	777	0800	15-		
V. FACILIT	Y MAILING ADDRE	ESS .				45 44	48 49 - 51	52 - 55		M	
		A. STREET OR P.O.	вох	12				197 VAIG			3/8
0	Victory Lane)									
15 14		B. CITY OR TOWN				CISTATE D. ZIP COD	E				
Leest	ourg		-	1		VA 20176					
19 18	TY LOCATION					********	51				
VI. PACIEI		ROUTE NO. OR OTHER S	PECI	FIC	DENTIFI	ER					
5 42009	Victory Lane	(-1	-							
15 16		COUNTY NAME		-		45					
Loudou		T T T T T T	-1	7							
**			•	1.		70		-Larely			
ej		C. CITY OR TOWN	-	reini)		D.STATE E. ZIP COD	F. COUN	TY CODE			
6 Leest	ourg					VA 20176					2.0

CONTINUED FROM THE FRONT			
VII. SIC CODES (4-digit, in order of priority)			
A. FIRST		B. SECOND	-CEIVE
Sewage System	7 N/A (specify)	N/A M/	2 6 2010 Q-NRO
C. THIRD	s (specify)	D. FOURTH DE	3
7 N/A	7 N/A (specify)	N/A	4-NRO
VIII. OPERATOR INFORMATION			
	AME TO THE TOTAL T		B. Is the name listed in Item VIII-A also the
8 Loudoun County Sanitation Authority, dba	Loudoun Water		owner?
C. STATUS OF OPERATOR (Enter the appropriate letter int.	o the answer box if "Other", thecify i	D. PHONE	area code & no.)
F = FEDERAL M = PUBLIC (other than federal or state) S = STATE O = OTHER (specify) P = PRIVATE	(specify)	A 571 2	91 7700
E, STREET OR P.O. BOX		(6) (0 - 10 (1	21 22 - 26
P.O. Box 4000			
F. CITY OR TOWN	G.STATE H. ZIP	CODE IX. INDIAN LAND	- Panistra
B Ashburn	VA 2014	Is the facility located	
15 16		YES	Жио
X. EXISTING ENVIRONMENTAL PERMITS	40 At 42 47 ·	19 11 (COM) 1 (S.Ps.	Historia Alexe III SERVI
	r Emissions from Proposed Sources;		10.850
9 N VA0067938 9 P N	/A		
B. UIC (Underground Injection of Fluids)	E. OTHER (specify)	1	F 1070
9 U N/A 9 N/A 9 N/A 15 15 15 17 14	V/A	(specify)	
C. RCRA (Hazardous Wastes)	E. OTHER (specify)		-12/4129
9 R N/A 9 N	V/A	(specify)	
XI. MAP			
Attach to this application a topographic map of the area ex the outline of the facility, the location of each of its exist treatment, storage, or disposal facilities, and each well wh water bodies in the map area. See instructions for precise re-	ing and proposed intake and disc ere it injects fluids underground.	harge structures each of i	te hazardoue waeta
XII. NATURE OF BUSINESS (provide a brief description)	quirements.	1. 有 数据 数据 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	
And that one of positivess iprovide a liner description (
North Spring Behavioral Healthcare is a 77-bed re	sidential treatment facility servi	ng adolescents.	
		/1	
	2		
		77	
XIII. CERTIFICATION (see instructions)			Sales of the last
I certify under penalty of law that I have personally exami attachments and that, based on my inquiry of those per application, I believe that the information is true, accurate false information, including the possibility of fine and impri	sons immediately responsible for and complete. I am aware that	obtaining the information	n contained in the
	3. SIGNATURE	[c.c	ATE SIGNED
J. Scott Zeiter	Chit Juli		5/24/10
COMMENTS FOR OFFICIAL USE ONLY			THE RESERVE THE PARTY.
C			



These data are confidential and may not be copied or distributed without Loudoun Water's permission. Water and wastewater data are the property of Loudoun Water. Base map data are the property of Loudoun County Office of Mapping and Geographic Information (all rights reserved).

These data and all maps thereby derived are considered best available information and are provided "as-is" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular

Prepared by the Loudoun Water GIS Department; please report errors and updates to: GISSupport@loudounwater.org.

210 420 840 Feet 1 inch = 350 feet

Wastewater Treatment Plant June 2009

- Well
- Potential Pollution Source 5 Ft Contours

WWTP Treatment Plant

100 Yr Floodplain

1/4 Mile Buffer



VPDES Permit Application Addendum

1.	Entity to whom the permit is to be issued: North Spring Behavioral Healthcare Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.
2.	Is this facility located within city or town boundaries? Y (N)
3.	Provide the tax map parcel number for the land where the discharge is located. PIN 185273670
4.	For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? $\underline{0}$
5.	What is the design average effluent flow of this facility? $\underline{0.010}$ MGD For industrial facilities, provide the max. 30-day average production level, include units: $\underline{N/A}$
	In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? (Y) N
	If "Yes", please identify the other flow tiers (in MGD) or production levels: <u>See attached explanation</u> Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?
6.	Nature of operations generating wastewater: Domestic discharge from commercial/industrial operations
	% of flow from domestic connections/sources
	Number of private residences to be served by the treatment works:
	100 % of flow from non-domestic connections/sources
7.	Mode of discharge:Continuous _X_IntermittentSeasonal
	Describe frequency and duration of intermittent or seasonal discharges:
8.	Identify the characteristics of the receiving stream at the point just above the facility's discharge point:
	Permanent stream, never dry X Intermittent stream, usually flowing, sometimes dry
	Ephemeral stream, wet-weather flow, often dry
	 Effluent-dependent stream, usually or always dry without effluent flow Lake or pond at or below the discharge point
	Other:
9.	Approval Date(s):
	O & M Manual July 13, 1988 Sludge/Solids Management Plan July 11, 1988
	Have there been any changes in your operations or procedures since the above approval dates? Y/N

North Spring Behavioral Healthcare WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

FORM

2A NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. Basic Application Information for all Applicants. All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd. All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. Certification. All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. Expanded Effluent Testing Data. A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. Toxicity Testing Data. A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. Industrial User Discharges and RCRA/CERCLA Wastes. A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. Combined Sewer Systems. A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

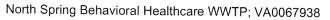


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BASIC APPLICATION INFORMATION

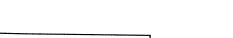
PAF	RT A. BASIC APP	LICATION IN	FORMATION FOR ALL	_ APPLICANTS:						
All ti	eatment works mus	t complete ques	tions A.1 through A.8 of t	this Basic Application	Information pac	ket.				
4.1.	Facility Information	n.								
	Facility name	North Sprin	g Behavioral Healthc	are WWTP						
	Mailing Address	42009 Victo	ory Lane							
		Leesburg, \	/irginia 20176							
	Contact person	J. Scott Zei	ter							
	Title	Chief Execu								
	Telephone number	703-777-08	00							
	Facility Address	42009 Victo	ory Lane							
	(not P.O. Box)	Leesburg, \	/A 20176							
.2.	Applicant Informati	ion. If the applica	ant is different from the abov	re, provide the following:	:					
	Applicant name		ounty Sanitation Autho							
	Mailing Address	P.O. Box 40	000							
		Ashburn, VA 20146								
	Contact person	Todd Danie	lson							
	Title	Manager, C	ommunity Systems							
	Telephone number	571-291-78	35							
	Is the applicant the	owner or opera	tor (or both) of the treatm	ent works?						
	owner	X	_ operator							
		espondence rega X	arding this permit should be	directed to the facility or	the applicant.					
	facility		_ applicant							
3.	Existing Environme (include state-issued	ntal Permits. Permits).	rovide the permit number of	any existing environmen	ntal permits that ha	ave been issued to the treatment works				
	NPDES VA0067	938		PSD	N/A					
	uic N/A			Other	N/A					
	RCRA N/A			Other	N/A					
4.	Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of eac entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).									
	Name		Population Served	Type of Collection System Ownership						
	North Spring		approx. 100	separate sa		North Spring				
				w/kitchen gr	rease trap					
			approx 100							
	Total pop	oulation served	approx. 100							



Form Approved 1/14/99 OMB Number 2040-0086

5. I	ndian Country.		· · · · · · · · · · · · · · · · · · ·				***************************************
á	a. Is the treatment works located in Indian Cou	untry?					
	YesXNo						
t	 Does the treatment works discharge to a rec through) Indian Country? 	ceiving water that is eithe	er in Indian Countr	y or that is upstrea	am from (and	eventually flo	ows
	Yes X No						
•	Flow. Indicate the design flow rate of the treatmal Flow rate and maximum daily flow rate for e Floonth of "this year" occurring no more than thre	each of the last three year	re in ach voorte de	ata musat ha haaad	uilt to handle). on a 12-mont	Also provide th time perio	e the avera d with the
a	n. Design flow ratemgd						
		Two Years Ago	Last Year	r	This Year		
b	. Annual average daily flow rate	0.0083	0.008	=	0.0107	7	mad
c	. Maximum daily flow rate	0.0180	0.019		0.0212		mgd
,	2-11-42-10					***	mgd
. 0	Collection System. Indicate the type(s) of colle ontribution (by miles) of each.	ection system(s) used by	the treatment pla	int. Check all that	apply. Also e	stimate the	percent
	X Separate sanitary sewer				100		0.4
_	Combined storm and sanitary sewer				~0~		_ %
							_ %
	ischarges and Other Disposal Methods.						
а	. Does the treatment works discharge effluent	t to waters of the U.S.?		Χ	Yes		No
	If yes, list how many of each of the following	types of discharge point	ts the treatment w	orks uses:		**************************************	
	i. Discharges of treated effluent					~1~	
	ii. Discharges of untreated or partially treat	ted effluent			******	~0~	
	iii. Combined sewer overflow points				-	~0~	
	iv. Constructed emergency overflows (prior	to the headworks)				~0~	
	v. Other				-	~0~	

b	 Does the treatment works discharge effluent that do not have outlets for discharge to water 	t to basins, ponds, or other ers of the U.S.?	er surface impoun	dments	Yes	Х	NI-
	If yes, provide the following for each surface				res	***************************************	_ No
	Location:						
	Annual average daily volume discharged to s	surface impoundment(s)				mgd	
	Is discharge continuous or	intermitte	nt?			mgu	
C.	Does the treatment works land-apply treated				Yes	X	_ No
	If yes, provide the following for each land app	olication site:				*	
	Annual average daily volume applied to site:	-		Mgd			
	Is land application continuou	us or inte	ermittent?				
d.	Does the treatment works discharge or transparted treatment works?	port treated or untreated v	wastewater to ano	other	Yes	X	No



North Spring Behavioral Healthcare WWTP; VA0067938

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If transport is by a par	ty other than the applicant, provide:			
Transporter name:	N/A			
Mailing Address:				
Contact person:	N/A			
Title:				
Telephone number:				
Name:	orks that receives this discharge, provide the following:		·	· · · · · · · · · · · · · · · · · · ·
Mailing Address:				

Contact person:				
Contact person: Title:				
•				
Title: Telephone number:	NPDES permit number of the treatment works that receives this discharge.			
Title: Telephone number: If known, provide the N	NPDES permit number of the treatment works that receives this discharge.			mgd
Title: Telephone number: If known, provide the N Provide the average da Does the treatment wo		Yes	X	mga
Title: Telephone number: If known, provide the N Provide the average da Does the treatment wo A.8.a through A.8.d ab	aily flow rate from the treatment works into the receiving facility.	Yes	X	mgd No
Title: Telephone number: If known, provide the N Provide the average da Does the treatment wo A.8.a through A.8.d ab	aily flow rate from the treatment works into the receiving facility. orks discharge or dispose of its wastewater in a manner not included in ove (e.g., underground percolation, well injection)?	Yes	_X	



North Spring Behavioral Healthcare WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

.9.	De	scription of Outfall.				
,	a.	Outfall number	001			
ļ	b.	Location	Leesburg	<u></u>	20	0175
			(City or town, if applicable) Loudoun			Zip Code)
			(County) 39 degrees 08' 56"			A ^{State)} 7 degrees 32' 52"
			(Latitude)		(L	7 degrees 32' 52" Longitude)
(C.	Distance from shore (if	applicable)	at shore	ft.	,
(d.	Depth below surface (if		0	- 11. ft.	
	€.	Average daily flow rate	approac.c _j	0.0107	-	
•	3 .	Average daily now rate		0.0101	_ mgd	
f	f.	Does this outfall have ei	ither an intermittent or a periodic	ic		
		discharge?		XYes		No (go to A.9.g.)
		If yes, provide the follow	ving information:			
				daily 265 days		
		Number of times per yea		daily, 365 days		
		Average duration of eac	· ·	intermittent	***************************************	
		Average flow per discha	rge;	0.0005		mgd
				1 - 1 D	***************************************	
		Months in which dischar	rge occurs:	varies, Jan-Dec		
g		Months in which dischards a soutfall equipped with a		varies, Jan-Dec	X	
g					X	No
	J.		a diffuser?		X	
). Des	Is outfall equipped with a	a diffuser? Naters.	Yes	X	
10. E). Des	Is outfall equipped with a	a diffuser? Naters.	Yes	Х	
10. E). Des	Is outfall equipped with a scription of Receiving V	a diffuser? Waters. Limestone Bra	Yes		
10. C). Des	Is outfall equipped with a	a diffuser? Waters. Limestone Bra	Yes		
10. C). Des	Is outfall equipped with a scription of Receiving Water Name of receiving water Name of watershed (if kr	a diffuser? Waters. Limestone Bra	Yes Inch UT Middle Potomac-Cato		
10. C a	J. Des	Is outfall equipped with a scription of Receiving Water Name of receiving water Name of watershed (if kn United States Soil Conse	a diffuser? Naters. Limestone Bra nown) ervation Service 14-digit waters	Yes Inch UT Middle Potomac-Cato Shed code (if known):	octin	
10. E	J. Des	Is outfall equipped with a scription of Receiving Water Name of receiving water Name of watershed (if kn United States Soil Conse	a diffuser? Naters. Limestone Bra	Yes Inch UT Middle Potomac-Cato	octin	
10. C a	Des	Is outfall equipped with a scription of Receiving V Name of receiving water Name of watershed (if kn United States Soil Conse	a diffuser? Naters. Limestone Bra nown) ervation Service 14-digit waters nent/River Basin (if known):	Yes Inch UT Middle Potomac-Cato Shed code (if known): Potomac	octin 	
а b	Des	Is outfall equipped with a scription of Receiving Water Name of receiving water Name of watershed (if kn United States Soil Conse	A diffuser? Naters. Limestone Bra nown) ervation Service 14-digit waters nent/River Basin (if known):	Yes Inch UT Middle Potomac-Cato Shed code (if known): Potomac	octin 	No
10. C a b	J. Des	Is outfall equipped with a scription of Receiving Water Name of receiving water Name of watershed (if known that watershed is soil Conseived States Soil Conseived State Management United States Geological Critical low flow of receives	a diffuser? Naters. Limestone Bra nown) ervation Service 14-digit waters nent/River Basin (if known): I Survey 8-digit hydrologic catal ring stream (if applicable):	Yes Inch UT Middle Potomac-Cato Shed code (if known): Potomac loging unit code (if known):	octin River	No
а b	Des	Is outfall equipped with a scription of Receiving Water Name of receiving water Name of watershed (if known that watershed is seen to be a seen that watershed is seen to be a seen that watershed watershed is seen to be a seen that watershed is seen to be a seen that watershed is seen that watershed is seen to be a seen that watershed is seen	a diffuser? Naters. Limestone Bra nown) ervation Service 14-digit waters nent/River Basin (if known): I Survey 8-digit hydrologic catal ring stream (if applicable):	Yes Inch UT Middle Potomac-Cato Shed code (if known): Potomac loging unit code (if known):	Piver Cfs	No

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FACILITY NAME AND PERMIT NUMBER:

North Spring Behavioral Healthcare WWTP; VA0067938

a. vviid	at levels of treatment a			E.E.A.				
	Primary		Se	condary				
***************************************	Advanced		Oti	ner. Describe:				
b. Indic	cate the following remo	oval rates (as	applicable):					
Des	ign BOD ₅ removal <u>or</u> [Design CBOI	O ₅ removal			85	%	
Desi	ign SS removal					85	%	
Desi	ign P removal					N/A	%	
Desi	ign N removal					N/A	%	
Othe	er NH3-N				***************************************	85		
c. Wha	at type of disinfection is lorination/dechlor	s used for the ination	e effluent from t	his outfall? If disi	nfection varies b	y season, plea	ase describe.	
If dis	sinfection is by chloring	ation, is dech	lorination used	for this outfall?		X Y	es	No
d. Does	s the treatment plant h	ave post aen	ation?			V	es	No No
dischard collected 40 CFR I	Testing Information ters. Provide the indiged. Do not include d through analysis c Part 136 and other an, effluent testing daumber:	information onducted us opropriate C	on combined sing 40 CFR P DA/QC require	ured by the peri sewer overflows art 136 methods ments for stands	nitting authori in this section . In addition, t	ty <u>for each oi</u> n. All informa his data mus	utfall through whi ition reported must t comply with QA	ch effluent is st be based on dat QC requirements
dischard collected 40 CFR I minimun	ged. Do not include d through analysis c Part 136 and other a m, effluent testing da	information onducted us ppropriate C ita must be	on testing required on combined sing 40 CFR P. QA/QC required based on at least	ured by the peri sewer overflows art 136 methods ments for stands	nitting authori in this section . In addition, t	ty <u>for each or</u> n. All informa his data mus or analytes no no more tha	utfall through whi tion reported mus t comply with QA, ot addressed by 40 n four and one-ha	<u>ch effluent is</u> st be based on dat (QC requirements D CFR Part 136. A llf years apart.
discharc collected 40 CFR I minimun	ged. Do not include d through analysis c Part 136 and other a n, effluent testing da umber:	information onducted us ppropriate C ita must be	on testing required on combined sing 40 CFR P. QA/QC required based on at least	ilred by the peri sewer overflows art 136 methods ments for standa ast three sample	nitting authori in this section . In addition, t	ty <u>for each or</u> n. All informa his data mus or analytes no e no more tha	utfall through whi ition reported must t comply with QA	ch effluent is st be based on dat (QC requirements 0 CFR Part 136. A lif years apart.
dischare collecter 40 CFR I minimun	ged. Do not include d through analysis c Part 136 and other a n, effluent testing da umber:	information onducted uppropriate Cota must be 001	on combined sing 40 CFR P. AA/QC required based on at lease MAXIMUM D.	Sewer overflows art 136 methods ments for stand ast three sample AILY VALUE	mitting authoris in this section. In addition, the ard methods for and must be and must be	ty <u>for each or</u> n. All informa his data mus or analytes no e no more tha	utfall through whition reported must comply with QA or addressed by 40 n four and one-ha	ch effluent is the based on dat (QC requirements 0 CFR Part 136. A lif years apart. UE Number of Sample
dischare collected 40 CFR I minimum Outfall nu F OH (Minimum)	ged. Do not include d through analysis c Part 136 and other a n, effluent testing da umber:	information onducted us ppropriate Cuta must be 001	on combined sing 40 CFR P. DA/QC required based on at less MAXIMUM D. Value	AILY VALUE Units S.u.	mitting authori s in this section . In addition, t ard methods fo as and must be	ty <u>for each or</u> n. All informa his data mus or analytes no e no more tha	utfall through whition reported must comply with QA or addressed by 40 n four and one-ha	ch effluent is st be based on dat QC requirements 0 CFR Part 136. Aulf years apart. UE Number of Sample
dischare collecter 40 CFR I minimum Outfall nu F OH (Minimum)	ged. Do not include d through analysis c Part 136 and other a n, effluent testing da umber:	information onducted uppropriate Cotta must be 001	on combined sing 40 CFR P QA/QC require based on at less MAXIMUM D	Sewer overflows art 136 methods ments for stand ast three sample AILY VALUE	mitting authoris in this section. In addition, the ard methods for and must be and must be	ty for each or n. All informa his data mus or analytes no no more tha	utfall through whition reported must comply with QA or addressed by 40 n four and one-ha	ch effluent is st be based on dat (QC requirements 0 CFR Part 136. A slif years apart. UE Number of Sample 851
dischare collecter 40 CFR I minimum Outfall nu OH (Minimum) H (Maximum)	ged. Do not include d through analysis c Part 136 and other a n, effluent testing da umber: PARAMETER	information onducted us ppropriate Cota must be 001	MAXIMUM D Value 5.3	AILY VALUE Units s.u. S.u.	witting authoris in this section. In addition, the ard methods for seand must be Value	ty for each or All information his data must be an analytes not analytes not an omore that AVE	utfall through whitton reported must comply with QA or addressed by 40 n four and one-ha	ch effluent is st be based on dat QC requirements 0 CFR Part 136. Aulf years apart. UE Number of Sample
Outfall nu OH (Minimum) OH (Maximum) OH (Maximum) OH (Maximum) OH (Maximum) OH (Maximum)	ged. Do not include d through analysis c Part 136 and other a m, effluent testing da umber: PARAMETER Minter)	onducted under information onducted un ppropriate Cotta must be 001	MAXIMUM D Value 5.3 3.7 0212 11.0	AILY VALUE Units s.u. S.u. MGD C	value Value 7.7 0.00	ty for each or n. All informathis data mus or analytes no no more that AVE	utfall through whitton reported must comply with QA or addressed by 4th four and one-had RAGE DAILY VA Units S.U.	ch effluent is st be based on dat (QC requirements 0 CFR Part 136. A lif years apart. UE Number of Sample 851 851
Outfall number (Washington) Outfall number (Minimum) OH (Maximum) Flow Rate Temperature (S * For pH p	American Section 1 (1) (2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	im and a max	MAXIMUM D Value 6.3 3.7 .0212 11.0 25.9 kimum daily value	AILY VALUE Units s.u. S.u. MGD C	value 7.7 0.00 14.1 22.5	ty for each or n. All informathis data mustor analytes no no more that AVE	utfall through whitton reported must comply with QA. or addressed by 4 in four and one-hall RAGE DAILY VA Units s.u. MGD C C	ch effluent is st be based on dat (QC requirements 0 CFR Part 136. A slif years apart. UE Number of Sample 851 851 483
Outfall number (Maximum) Flow Rate Temperature (S * For pH p	ged. Do not include d through analysis c Part 136 and other a m, effluent testing da umber: PARAMETER Minter)	im and a max	MAXIMUM D Value 5.3 3.7 0212 11.0	AILY VALUE Units s.u. S.u. MGD C	value	ty for each or n. All informathis data mustor analytes no no more that AVE	utfall through whitton reported must comply with QA or addressed by 40 n four and one-hall RAGE DAILY VA Units s.u. MGD C	ch effluent is st be based on dat QC requirements CFR Part 136. A lif years apart. UE Number of Sample 851 851 483
dischare collecter 40 CFR I minimum Outfall nu H (Minimum) H (Maximum) How Rate emperature (Vemperature (Semperature (Se	American Section 1 (1) (2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	im and a max	MAXIMUM DAILY	AILY VALUE Units s.u. S.u. MGD C	value 7.7 0.00 14.1 22.5	ty for each or n. All informathis data mustor analytes no no more that AVE	utfall through whitton reported must to comply with QAD to addressed by 41 in four and one-half through the complete through the comple	ch effluent is st be based on date of the control o
dischare collecter 40 CFR I minimum Outfall nu H (Minimum) H (Maximum) How Rate Emperature (V Emperature (S * For pH I	American Section 1 (1) (2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	im and a max MAXIM DISC	MAXIMUM DAILY CHARGE Units	AVERAC	Value Value 7.7 0.00 14.1 22.5	AVE AVE Number of	utfall through whitton reported must to comply with QAD to addressed by 41 in four and one-half through the complete through the comple	ch effluent is st be based on date of the control o
dischare collecter 40 CFR I minimum Outfall nu H (Minimum) H (Maximum) How Rate Emperature (S * For pH I POL	Minter) Minter) Minter) Minter) Minter Mi	im and a maxim DISC	MAXIMUM DAILY CHARGE Units	AVERAC	Value Value 7.7 0.00 14.1 22.5	AVE AVE Number of	utfall through whitton reported must to comply with QAD to addressed by 41 in four and one-half through the complete through the comple	ch effluent is st be based on date of the control o
outfall number of the following of the f	Minter) Summer) Please report a minimu. LUTANT LAND NONCONVEN DXYGEN BOD-5	im and a max MAXIM DISC	MAXIMUM DAILY CHARGE Units	S.u. S.u. MGD C AVERAC	value 7.7 O.00 14.1 22.5 SE DAILY DISC	AVE AVE HARGE Number of Samples	utfall through whition reported must comply with QA or addressed by 40 n four and one-har RAGE DAILY VA_Units S.U. MGD C C ANALYTICAL METHOD	ch effluent is st be based on dar (QC requirements of CFR Part 136. A lift years apart.) UE Number of Sample 851 851 483 368 ML / MDL
oH (Minimum) OH (Maximum) OH (Maximum) Flow Rate Emperature (V Temperature (S * For pH p	Amber: PARAMETER Winter) Summer) Please report a minimu. LUTANT LAND NONCONVEN DXYGEN BOD-5 t one) CBOD-5	im and a maxim DISC	MAXIMUM DAILY CHARGE Units MROUNDS. mg/L MROTHER PROPERTY OF THE PROPERTY	Sewer overflows art 136 methods ments for standast three sample with the sampl	value Value 7.7 0.00 14.1 22.5 GE DAILY DISC Units	AVE BHARGE Number of Samples	utfall through whitton reported must to comply with QA to addressed by 4th of four and one-half through the complete of the co	ch effluent is st be based on dat (QC requirements of CFR Part 136. A lift years apart.) UE Number of Sample 851 851 483 368 ML / MDL

2A YOU MUST COMPLETE

North Spring Behavioral Healthcare WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

BASIC APPLICATION INFORMATION

	RT B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day). $-N/A$
All	applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).
B.1	. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration. gpd
	Briefly explain any steps underway or planned to minimize inflow and infiltration.
B.2	Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)
	a. The area surrounding the treatment plant, including all unit processes.
	b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
	c. Each well where wastewater from the treatment plant is injected underground.
	d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
	e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
	f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rai or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.
B.3.	Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.
B.4.	Operation/Maintenance Performed by Contractor(s).
	Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?YesNo
	If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).
	Name:
	Mailing Address:
	Telephone Number:
	Responsibilities of Contractor:
	Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)
	a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.
	b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.
	YesNo

FACILITY	NAME	AND	DEDMIT	NIIMBED.	

North Spring Behavioral Healthcare WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

c if the a	nswer to B.5.b is	"Yes," briefl	y describe, includ	ing new maxim	um daily inflow r	rate (if applicable).		
1 01 1111	e dates imposed l provements planr e dates as accura	ieu independ	aenily of local, Sta	r any actual da ate, or Federal a	tes of completion	n for the implemen e planned or actua	tation steps listed beloat completion dates, as	ow, as applicable. s applicable.
			Schedule		Actual Completion	on		
Implem	entation Stage		MM / DD /	YYYY N	MM / DD / YYYY			
– Begir	construction		_/_/	/	/			
– End	construction		// _		//	_		
– Begir	n discharge		//_		//			
– Attair	operational leve	I			//	•		
e. Have a	ppropriate permit	ts/clearances	s concerning othe	r Federal/State	requirements be	en obtained?	YesNo	
Describ	e briefly:						***************************************	
	WHO CONTROL AND							
B.6. EFFLUENT	TESTING DATA	(GREATER	THAN O.1 MGE	ONLY).				
data must c	omply with QA/C by 40 CFR Part 1 f years old.	C requireme	si be based on da ents of 40 CFR Pa	ata collected thi art 136 and oth esting data mus	ough analysis co er appropriate O	onducted using 40 A/QC requirement least three pollute	c. Provide the indicate provided in CFR Part 136 method is for standard method int scans and must be	ds. In addition, this
	-	DISCH Conc.	IARGE Units	Conc.	Units	Number of	ANALYTICAL	ML/MDL
						Samples	METHOD	
ONVENTIONAL	AND NONCONV	ENTIONAL	COMPOUNDS.				·	
MMONIA (as N)			*					
CHLORINE (TOTA RESIDUAL, TRC)	AL .							
ISSOLVED OXY	GEN			****				
OTAL KJELDAHI	_							
IITROGEN (TKN)				*****				
IITRATE PLUS N IITROGEN DIL and GREASE	IIRIIE							
HOSPHORUS (T	otal)							
	1							
OTAL DISSOLVE OLIDS (TDS)	:D							
THER								
REFER TO	THE APPL	LICATIO		ND OF P EW TO D		E WHICH C	THER PARTS	S OF FORM
					COMPLET			or rotaly

North Spring Behavioral Healthcare WWTP; VA0067938

BASIC APPLICATION INFORMATION

Form Approved 1/14/99 OMB Number 2040-0086

PART C. CERTIFICATION All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted. Indicate which parts of Form 2A you have completed and are submitting: Basic Application Information packet Supplemental Application Information packet: Part D (Expanded Effluent Testing Data) Part E (Toxicity Testing: Biomonitoring Data) Part F (Industrial User Discharges and RCRA/CERCLA Wastes) Part G (Combined Sewer Systems) ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. J. Scott Zeiter, Chief Executive Officer

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

CEO

703-777-0800

SEND COMPLETED FORMS TO:

Name and official title

Telephone number

Signature

Date signed

North Spring Behavioral Healthcare WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA - N/A

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number:	(Con	nplete or	nce for ea	nch outfa	ll dischar	ging effl	uent to w	aters of	the United S	States.)	
POLLUTANT		MAXIM	JM DAIL HARGE	Y			E DAILY				
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL
METALS (TOTAL RECOVERABLE), (CYANIDE,	PHENOL	S, AND I	IARDNE	SS.		-I		1 Campico		
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM									*		
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS CaCO ₃)										***************************************	
Use this space (or a separate sheet) to	provide inf	formation	on other	metals re	quested by	the perr	nit writer.				
						I					



North Spring Behavioral Healthcare WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

Outfall number:	_ (Comple	te once	for each	outfall di	schargin	g effluen	it to wate	ers of the	United Stat	es.)	
POLLUTANT	1	MAXIMU DISCI	JM DAIL' HARGE	Y		VERAGE					
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYLVINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											***
1,2-DICHLOROETHANE											A
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
I,3-DICHLORO-PROPYLENE											***
ETHYLBENZENE											
//ETHYL BROMIDE											***************************************
//ETHYL CHLORIDE											**************************************
METHYLENE CHLORIDE											
,1,2,2-TETRACHLORO-ETHANE											
ETRACHLORO-ETHYLENE											
OLUENE											



North Spring Behavioral Healthcare WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

POLLUTANT	Conc.	MAXIMU DISCH Units	JM DAIL HARGE Mass	Y Units			Mass Mass		e United State ARGE Number of Samples	ANALYTICAL METHOD	ML/ MDL
1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLORETHYLENE VINYL CHLORIDE Use this space (or a separate sheet) to proceed the separate sheet).		Units	Mass		Conc.	Units	Mass	Units	of		ML/ MDL
1,1,2-TRICHLOROETHANE TRICHLORETHYLENE VINYL CHLORIDE Use this space (or a separate sheet) to pi	rovide in	formation	on other	volatile or					oumpies		
TRICHLORETHYLENE VINYL CHLORIDE Use this space (or a separate sheet) to pi	rovide in	formation	on other	volatile o							
VINYL CHLORIDE Use this space (or a separate sheet) to provide the space (or a separate sheet) to provide the space (or a separate sheet).	rovide in	formation	on other	volatile or							ı
Use this space (or a separate sheet) to pi	rovide in	formation	on other	volatile or							
	rovide in	formation	on other	volatile or							
ACID-EXTRACTABLE COMPOUNDS					rganic con	npounds	equested	by the p	ermit writer.		
ACID-EXTRACTARI E COMPOLINIOS		L									
NOIS EXTRAGRABLE CONFOUNDS											1
P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL										***************************************	
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											
Use this space (or a separate sheet) to pro	ovide info	ormation o	on other a	icid-extrac	ctable com	pounds r	equested	by the p	ermit writer.		
BASE-NEUTRAL COMPOUNDS.	L								L		
ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											

	,								
BENZO(A)PYRENE									
FACILITY NAME AND PERMIT NUMBER: North Spring Behavioral Healthcare WWTP; VA0067938									oved 1/14/99 ber 2040-0086

Outfall number:	(Comple	te once	for each	outfall d	ischargin	g effluer	nt to wate	ers of the	United State	es.)	
POLLUTANT		MAXIM	JM DAIL' HARGE	Y	A	VERAG	E DAILY	DISCH	ARGE		
	Conc.	Units		Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL
3,4 BENZO-FLUORANTHENE											
BENZO(GHI)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											***************************************
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE								1			
,4-DINITROTOLUENE											
,6-DINITROTOLUENE											

1,2-DIPHENYLHYDRAZINE											
FACILITY NAME AND PERMIT I	FACILITY NAME AND PERMIT NUMBER:									Form And	
North Spring Behavioral H	ealthca	re WV	/TP; V	400679	938		Form Approved 1/14/99 OMB Number 2040-0086				
Outfall number:	_ (Comple	ete once	for each	outfall d	ischargin	g effluer	nt to wate	ers of the	e United Sta	tes)	
POLLUTANT		MAXIM	JM DAIL'	Y	ischarging effluent to waters of the United State AVERAGE DAILY DISCHARGE						
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO- PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
2A YOU MUST COMPLETE

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

N-NITROSODI- METHYLAMINE

N-NITROSODI-PHENYLAMINE

1,2,4-TRICHLOROBENZENE

PHENANTHRENE

PYRENE

North Spring Behavioral Healthcare WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E

if no biomonitoring data is required, do no complete.	t complete Part E. Refer to the Applic	ation Overview for directions on which o	other sections of the form to
E.1. Required Tests.			
Indicate the number of whole ef	ffluent toxicity tests conducted in the p	ast four and one-half years.	
E.2. Individual Test Data. Complete the	e following chart for each whole offluer	nt toxicity test conducted in the last four more than three tests are being reporte	and one-half years. Allow one d.
	Test number:	Test number:	Test number:
a. Test information.			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			
b. Give toxicity test methods followe	d.		
Manual title			
Edition number and year of publication			
Page number(s)			
c. Give the sample collection method	d(s) used. For multiple grab samples,	indicate the number of grab samples u	sed.
24-Hour composite			
Grab			
d. Indicate where the sample was tal	ken in relation to disinfection. (Check a	all that apply for each)	
Before disinfection			
After disinfection			
After dechlorination			

North Spring Behavioral Healthcare WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

	Test number:	Test number:	Test number:				
e. Describe the point in the treatmer	nt process at which the sample was o	collected.					
Sample was collected:							
f. For each test, include whether the	test was intended to assess chronic	toxicity, acute toxicity, or both.					
Chronic toxicity							
Acute toxicity							
g. Provide the type of test performed	1.						
Static							
Static-renewal							
Flow-through							
h. Source of dilution water. If laborat	tory water, specify type; if receiving v	water, specify source.					
Laboratory water							
Receiving water							
i. Type of dilution water. It salt water	, specify "natural" or type of artificial	sea salts or brine used.					
Fresh water							
Salt water							
j. Give the percentage effluent used for all concentrations in the test series.							
		17000					
k. Parameters measured during the te	est. (State whether parameter meets	test method specifications)					
рН							
Salinity							
Temperature							
Ammonia							
Dissolved oxygen							
I. Test Results.							
Acute:							
Percent survival in 100% effluent	%	%	%				
LC ₅₀							
95% C.I.	%	%	%				
Control percent survival	%	%	%				
Other (describe)							

Form Approved 1/14/99
OMB Number 2040-0086

North Spring Behavioral Healthcare W	WTP; VA0067938		Oivis Number 2040-0086				
Chronic:							
NOEC	%	%	%				
IC ₂₅	%	%	%				
Control percent survival	%	%	%				
Other (describe)							
m. Quality Control/Quality Assurance.							
Is reference toxicant data available?							
Was reference toxicant test within acceptable bounds?							
What date was reference toxicant test run (MM/DD/YYYY)?							
Other (describe)							
E.4. Summary of Submitted Biomonitoring Te of toxicity, within the past four and one-half results. Date submitted:(M	est Information. If you have s	ubmitted biomonitoring test information, prmation was submitted to the permitting	or information regarding the cause gauthority and a summary of the				
REFER TO THE APPLICATION	END OF PA		ER PARTS OF FORM				

2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER:

North Spring Behavioral Healthcare WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES - N/A

PARIF	INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES - N/A
All treatm complete	nent works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must Part F.
GENER	RAL INFORMATION:
F.1. Pret	treatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?
	_YesNo
F.2. Nur indu	mber of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of ustrial users that discharge to the treatment works.
a.	Number of non-categorical SIUs.
b.	Number of CIUs.
	ICANT INDUSTRIAL USER INFORMATION:
Supply the provide to	ne following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and the information requested for each SIU.
F.3. Sign	nificant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages necessary.
Nar	ne:
Mai	ling Address:
F.4. Ind	ustrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.
F.5. Prin	ncipal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's charge.
Prin	cipal product(s):
Rav	v material(s):
F.6. Flo	w Rate.
a.	Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent. gpd (continuous orintermittent)
b.	Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.
	gpd (continuous orintermittent)
	reatment Standards. Indicate whether the SIU is subject to the following:
	Local limitsYesNo
	Categorical pretreatment standardsYesNo
If su	ibject to categorical pretreatment standards, which category and subcategory?

Form Approved 1/14/99 OMB Number 2040-0086

FACILITY NAME AND PERMIT NUMBER: North Spring Behavioral Healthcare WWTP; VA0067938 F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g.

ļ	upsets, interference) at the treatment works in the past three years?
	YesNo If yes, describe each episode.
1	A HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:
F.9.	RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? YesNo (go to F.12.)
F.10.	Waste Transport. Method by which RCRA waste is received (check all that apply):
	TruckRailDedicated Pipe
	,
F.11.	Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).
	EPA Hazardous Waste Number Amount Units
CEP	CLA (SUBERELIND) WASTEWATER RODA REMEDIATION/CORRECTIVE
ACT	CLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:
	Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?
	V () 1 - F () 1 - F () 1 - F () 1
	- / Williams
	Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.
F.13.	Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in
	the next five years).
F.14.	Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).
	(Attach additional sheets it necessary).
F.15	Waste Treatment.
1.10.	
	a. Is this waste treated (or will it be treated) prior to entering the treatment works?
	YesNo
	If yes, describe the treatment (provide information about the removal efficiency):
	b. In the displayer (or will the displayer he) and the control of
	b. Is the discharge (or will the discharge be) continuous or intermittent?
	ContinuousIntermittent If intermittent, describe discharge schedule.
···	
	FND OF PART F

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

North Spring Behavioral Healthcare WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION PART G. COMBINED SEWER SYSTEMS If the treatment works has a combined sewer system, complete Part G. G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information) a. All CSO discharge points. b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters). c. Waters that support threatened and endangered species potentially affected by CSOs. G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information: a. Locations of major sewer trunk lines, both combined and separate sanitary. b. Locations of points where separate sanitary sewers feed into the combined sewer system. c. Locations of in-line and off-line storage structures. d. Locations of flow-regulating devices. e. Locations of pump stations. **CSO OUTFALLS:** Complete questions G.3 through G.6 once for each CSO discharge point.

0.5. 2	,,,,	cription of Outlan.		
;	a.	Outfall number		
	b.	Location		
	~.		(City or town, if applicable)	(Zip Code)
			(County)	(State)
			(Latitude)	(I = = (f, d=)
			(Lautuuc)	(Longitude)
(C.	Distance from shore (if ap	pplicable)	ft.
(d.	Depth below surface (if a	pplicable)	ft.
•	e.	Which of the following we	ere monitored during the last year for this CS	50?
		Rainfall	CSO pollutant concentrations	CSO frequency
		CSO flow volume	Receiving water quality	ooo nequency
1	f.	How many storm events v	were monitored during the last year?	
G.4. C	sc	Events.		
				•
á	a.	Give the number of CSO		
			actual or approx.)	
ł	b.	Give the average duration		
		hours (actual or approx.)	

Form Approved 1/14/99 OMB Number 2040-0086

FACILITY NAME AND PERMIT NUMBER:

North Spring Behavioral Healthcare WWTP; VA0067938

	C.	Give the average volume per CSO event.					
		million gallons (actual or approx.)					
	d.	Give the minimum rainfall that caused a CSO event in the last year.					
		inches of rainfall					
G.5.	Des	cription of Receiving Waters.					
	a.	Name of receiving water:					
	b.	Name of watershed/river/stream system:					
		United States Soil Conservation Service 14-digit watershed code (if known):					
	c.	Name of State Management/River Basin:					
		United States Geological Survey 8-digit hydrologic cataloging unit code (if known):					
G.6.	csc	Operations.					
	De:	scribe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or ermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).					
RE	END OF PART G. REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.						
		ZA TOU WIUST COWIFLETE.					

EPA Form 3510-2A (Rev. 1-99). Replaces EPA forms 7550-6 & 7550-22.

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1.	All applicants must complete Section A (General Information).		
2.	Will this facility generate sewage sludge? X Yes No		
	Will thi	is facility derive a material from sewage sludge?Yes _X_No	
	If you a Derived	unswered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material From Sewage Sludge).	
3.	Will this facility apply sewage sludge to the land?Yes _X_No		
	Will se	wage sludge from this facility be applied to the land? X Yes No	
	If you a	inswered No to both questions above, skip Section C.	
	If you answered Yes to either, answer the following three questions:		
	a.	Will the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions? Yes _X_ No	
	b.	Will sewage sludge from this facility be placed in a bag or other container for sale or give-away for application to the land?Yes _X_No	
	c.	Will sewage sludge from this facility be sent to another facility for treatment or blending? X Yes No	
	If you a	nswered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).	
	If you a	nswered Yes to a, b or c, skip Section C.	
4.	Do you own or operate a surface disposal site? Yes X No		
	If Yes,	complete Section D (Surface Disposal).	

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

a. Facility name: North Spring Behavioral Healthcare WWTP b. Contact person: J. Scott Zeiter Title: 703-777-0800 c. Mailing address: 42009 Victory Lane Leesburg, VA 20176 d. Facility location: Street or Route #: 42009 Victory Lane County: Loudoun City or Town: Leesburg e. Is this facility a Class I sludge management facility? Yes X No f. Facility design flow rate: 0.010 mgd g. Total population served: approximately 100 h. Indicate the type of facility: X Publicly owned treatment works (POTW) Privately owned treatment works (POTW) Privately owned treatment works Blending or treatment operation Surface disposal site Other (describe): 2. Applicant Information. If the applicant is different from the above, provide the following: a. Applicant aname: Loudoun County Sanitation Authority b. Mailing address: P.O. Box 4000 44865 Loudoun Water Way Ashburn, VA 20146 c. Contact person: Todd Danielson Title: Manager of Community Systems Phone: 571-291-7835 d. Is the applicant the owner or operator (or both) of this facility? Owner	1.	Facili	ty Information.			
b. Contact person: J. Scott Zeiter Title: Chief Executive Officer Phone: 703-777-0800 c. Mailing address: 42009 Victory Lane Leesburg, VA 20176 d. Facility location: Street or Route #: 42009 Victory Lane County: Loudoun City or Town: Leesburg State: VA Zip: 20176 e. Is this facility a Class I sludge management facility? Yes X No f. Facility design flow rate: 0.010 mgd g. Total population served: approximately 100 h. Indicate the type of facility: X Publicly owned treatment works (POTW) Privately owned treatment works Blending or treatment operation Surface disposal site Other (describe): 2. Applicant Information. If the applicant is different from the above, provide the following: a. Applicant name: Loudoun County Sanitation Authority b. Mailing address: P.O. Box 4000 44865 Loudoun Water Way Ashburn, VA 20146 c. Contact person: Todd Danielson Title: Manager of Community Systems Phone: 571-291-7835 d. Is the applicant the owner or operator (or both) of this facility?owner Xoperator e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one)facility VPDES permit number (if applicable): VA0067938 b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices: Permit Number: Type of Permit:		a.	Facility name: North Spring Behavioral Healthcare WWTP			
Phone: 703-777-0800 c. Mailing address: 42009 Victory Lane Leesburg, VA 20176 d. Facility location: Street or Route #: 42009 Victory Lane County: Loudoun City or Town: Leesburg Loudoun Loudoun Loudoun City or Town: Loudoun City or Town: Loudoun City or Town: Loudoun City or Town: Loudoun		b.				
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h. Indicate the type of facility: X Publicly owned treatment works (POTW) — Privately owned treatment works — Blending or treatment operation — Surface disposal site — Other (describe): 2. Applicant Information. If the applicant is different from the above, provide the following: a. Applicant name: Loudoun County Sanitation Authority b. Mailing address: P.O. Box 4000 44865 Loudoun Water Way Ashburn, VA 20146 c. Contact person: Todd Danielson Title: Manager of Community Systems Phone: 571-291-7835 d. Is the applicant the owner or operator (or both) of this facility? — owner X operator c. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one) — facility X applicant 3. Permit Information. a. Facility's VPDES permit number (if applicable): VA0067938 b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices: Permit Number: Type of Permit:						
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b. Mailing address: P.O. Box 4000 44865 Loudoun Water Way Ashburn, VA 20146 c. Contact person: Todd Danielson Title: Manager of Community Systems Phone: 571-291-7835 d. Is the applicant the owner or operator (or both) of this facility?ownerXoperator e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one)facilityX applicant 3. Permit Information. a. Facility's VPDES permit number (if applicable):VA0067938 b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices: Permit Number:	۷.		Applicant name: London County Societies Anthony			
4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this 4. Contact person: Todd Danielson Title: Manager of Community Systems Phone: 571-291-7835 d. Is the applicant the owner or operator (or both) of this facility? owner			Mailing address: P.O. Poy 4000			
Ashburn, VA 20146 c. Contact person: Todd Danielson Title: Manager of Community Systems Phone: 571-291-7835 d. Is the applicant the owner or operator (or both) of this facility?ownerX operator e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one) facilityX applicant 3. Permit Information. a. Facility's VPDES permit number (if applicable): VA0067938 b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices: Permit Number: Type of Permit:		0.				
c. Contact person: Todd Danielson Title: Manager of Community Systems Phone: 571-291-7835 d. Is the applicant the owner or operator (or both) of this facility?owner						
Title: Manager of Community Systems Phone: 571-291-7835 d. Is the applicant the owner or operator (or both) of this facility? owner		C				
Phone: 571-291-7835 d. Is the applicant the owner or operator (or both) of this facility? ownerX operator e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one) facilityX applicant 3. Permit Information. a. Facility's VPDES permit number (if applicable):VA0067938 b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:		0.				
d. Is the applicant the owner or operator (or both) of this facility? ownerX operator e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one) facilityX applicant 3. Permit Information. a. Facility's VPDES permit number (if applicable): VA0067938 b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices: Permit Number: Type of Permit: 1. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this			3,000,000			
e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one) facilityX applicant 3. Permit Information. a. Facility's VPDES permit number (if applicable):		d.				
e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one) facility applicant 3. Permit Information. a. Facility's VPDES permit number (if applicable): VA0067938 b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices: Permit Number: Type of Permit:						
 facility X applicant Permit Information. a. Facility's VPDES permit number (if applicable): VA0067938 b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices: Permit Number: Type of Permit: none 4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this 		e.				
 3. Permit Information. a. Facility's VPDES permit number (if applicable): <u>VA0067938</u> b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices: Permit Number: <u>Type of Permit:</u> none 4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this 			facility X applicant			
a. Facility's VPDES permit number (if applicable): <u>VA0067938</u> b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices: Permit Number: <u>Type of Permit:</u> none Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this						
b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices: Permit Number:	3.	Permi	t Information.			
b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices: Permit Number:		a.	Facility's VPDES permit number (if applicable):VA0067938			
or applied for that regulate this facility's sewage sludge management practices: Permit Number:		b.	List on this form or an attachment, all other federal, state or local permits or construction approvals received			
Permit Number: Type of Permit: none Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this			or applied for that regulate this facility's sewage sludge management practices:			
 Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this 						
 Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country?Yes <u>X</u>No If yes, describe: 			none			
4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country?Yes <u>X</u> No If yes, describe:						
4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country?Yes <u>X</u> No If yes, describe:						
tacılıty occur in Indian Country?Yes _X_No If yes, describe:	4.	Indian	Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this			
		tacility	y occur in Indian Country? Yes X No If yes, describe:			

FACILITY NAME: North Spring Behanoral Healthcare WWTP

VPDES ERMIT NUMBER: VA0067938

- 5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:
 - a. Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
 - b. Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.
- 6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.
- 7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? __Yes _X No If yes, provide the following for each contractor (attach additional pages if necessary).

Name: <u>A&M Septic</u> Mailing address: <u>P.O. Box 184</u>

Summerduck, Va. 22742

Phone: <u>703-350-1121</u>

Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:

Contractor's License # 2705096806

If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).

8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION	SAMPLE DATE	ANALYTICAL	DETECTION LEVEL
	(mg/kg dry weight)		METHOD	FOR ANALYSIS
Arsenic	<0.05 mg/L	3/18/09	EPA 200.7	0.0500
Cadmium	<0.05 mg/L	3/18/09	EPA 200.7	0.0500
Chromium	0.0595 mg/L	3/18/09	EPA 200.7	0.0500
Copper	7.73 mg/L	3/18/09	EPA 200.7	0.0500
Lead	0.103 mg/L	3/18/09	EPA 200.7	0.0500
Mercury	0.00259 mg/L	3/18/09	EPA 245.2	0.0500
Molybdenum	<0.05 mg/L	3/18/09	EPA 200.7	0.0500
Nickel	0.0552 mg/L	3/18/09	EPA 200.7	0.0500
Selenium	<0.05 mg/L	3/18/09	EPA 200.7	0.0500
Zinc	5.58 mg/L	3/18/09	EPA 200.7	0.0500

9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:

\boxtimes Section	A (General Information)
⊠Section []	B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)
Section	C (Land Application of Bulk Sewage Sludge)
□ Section	D (Surface Disposal)

FACILITY NAME: North Spring Behanoral Healthcare WWTP

VPDE ERMIT NUMBER: VA0067938

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title: J. Scott Zeiter, Chief Executive Officer

Signature Date Signed 12/13/09

Telephone number: 703-777-0800

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

VPDE ERMIT NUMBER: VA0067938

SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1.		nt Generated On Site. Iry metric tons per 365-day period generated at your facility: <u>~1</u> dry metric tons				
2.	disposa	at Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or al, provide the following information for each facility from which sewage sludge is received. If you receive esludge from more than one facility, attach additional pages as necessary. Facility name: N/A Contact Person: Title: Phone ()				
	c.	Mailing address: Street or P.O. Box: City or Town: State: Zip:				
	d.	Facility Address: (not P.O. Box)				
	e. f.	Total dry metric tons per 365-day period received from this facility: dry metric tons Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:				
3.	Treatm	ent Provided at Your Facility: N/A				
	a.	YYYI I I I O I I I I I I I I I I I I I I				
	b.	Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:				
	c.	Which vector attraction reduction option is met for the sewage sludge at your facility? Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration) Option 4 (Specific oxygen uptake rate for aerobically digested sludge) Option 5 (Aerobic processes plus raised temperature) Option 6 (Raise pH to 12 and retain at 11.5) Option 7 (75 percent solids with no unstabilized solids) Option 8 (90 percent solids with unstabilized solids) None or unknown				
	d.	Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:				
	e.	Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above:				
4.	One of	ation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and Vector Attraction Reduction Options 1-8 (EQ Sludge). N/A ge sludge from your facility does not meet all of these criteria, skip Question 4.) Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land: dry metric tons Is sewage sludge subject to this section placed in bags or other containers for sale or give-away? YesNo				
5.	Sale or	Give-Away in a Bag or Other Container for Application to the Land.				

FACILITY NAME: North Spring Behavioral Healthcare WWTP

6.

VPDES ERMIT NUMBER: VA0067938

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.) Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: dry metric tons b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land. Shipment Off Site for Treatment or Blending. (Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.) a. Receiving facility name: Broad Run WRF b. Facility contact: Robert Canham Title: Plant Manager Phone: 571-291-7823 Mailing address: c. P. O. Box 4000 Ashburn, Va. 20146 d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: ________ dry metric tons e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal Permit Number: Type of Permit: VA0091383 **VPDES** f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? X Yes No Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility? X Class B __Neither or unknown Class A Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge: anaerobic digestion, 38% volatile reduction 95F 40 d retention Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the g. sewage sludge? X Yes No Which vector attraction reduction option is met for the sewage sludge at the receiving facility? X Option 1 (Minimum 38 percent reduction in volatile solids) ___ Option 2 (Anaerobic process, with bench-scale demonstration) ___ Option 3 (Aerobic process, with bench-scale demonstration) ___ Option 4 (Specific oxygen uptake rate for aerobically digested sludge) ___ Option 5 (Aerobic processes plus raised temperature) Option 6 (Raise pH to 12 and retain at 11.5) ___ Option 7 (75 percent solids with no unstabilized solids) ___ Option 8 (90 percent solids with unstabilized solids) None unknown Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge: h. Does the receiving facility provide any additional treatment or blending not identified in f or g above? Yes X No If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above: If you answered yes to f., g or h above, attach a copy of any information you provide to the receiving facility i.

to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.

If yes, provide a copy of all labels or notices that accompany the product being sold or given away.

Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-

away for application to the land? Yes X No

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	AME: North Spring Beh. foral Healthcare WWTP VPDE ERMIT NUMBER: VA0067938
k.	Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally
	used for such purposes? X Yes No. If no, provide description and specification on the vehicle used
	to transport the sewage sludge to the receiving facility.
	Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the
	week and the times of the day sewage sludge will be transported. From North Spring WWTP take right
	onto Route 15 South and merge onto Route 7 East. Turn right onto Loudoun County Parkway, then
	take left onto the access road for the Septage Receiving Area at the Broad Run Water Reclamation
	<u>Facility.</u>
Land	Application of Bulk Sewage Sludge. N/A
	plete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6;
compl	ete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)
a.	Total dry metric tons per 365-day period of sewage sludge applied to all land application sites:dry
	metric tons
b.	Do you identify all land application sites in Section C of this application?YesNo
0.	If no submit a convert the Land Application Plan (LAD) with this application? Yes No
	If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).
^	
c.	Are any land application sites located in States other than Virginia?YesNo
	If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the
1	States where the land application sites are located. Provide a copy of the notification.
d.	Attach a copy of any information you provide to the owner or lease holder of the land application sites to
	comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples
	may be obtained in Appendix IV).
Surfa	ce Disposal. N/A
	plete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)
a.	Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal
	sites: dry metric tons
b.	Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?
0.	YesNo
	If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send
	serving studge to more than one surface disposal site attack additional account or operate. If you send
c	sewage sludge to more than one surface disposal site, attach additional pages as necessary. Site name or number:
c. d.	
٦.	Contact person:
	Title:
	Phone: ()
	Contact is:Site OwnerSite operator
e.	Mailing address.
	Street or P.O. Box:
	City or Town: State: Zip:
f.	Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal
	site: dry metric tons
g.	List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of
	all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface
	disposal site:
	Permit Number: Type of Permit:
	T) DO OT FORMIT.
	eration. N/A
(Comp	olete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)
a.	Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge
	incinerator: dry metric tons
b.	Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?
	YesNo
	If no, answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send
	sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.
c.	Incinerator name or number:
~ .	monorator name of nameon.

7.

8.

9.

FACILITY NAME: North Spring Beh. oral Healthcare WWTP

VPDE ERMIT NUMBER: VA0067938

	d.	Contact person:
		Title:
		Phone: ()
		Contact is:Incinerator OwnerIncinerator Operator
	e.	Mailing address.
		Street or P.O. Box:
		City or Town: State: Zip: Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge
	f.	Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge
		incinerator: dry metric tons
	g.	List on this form or an attachment the numbers of all other federal, state or local permits that regulate the
		firing of sewage sludge at this incinerator:
		Permit Number: Type of Permit:
1.0	ъ.	
10.		sal in a Municipal Solid Waste Landfill. N/A
	(Comp	lete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information
	nuniai	h municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one pal solid waste landfill, attach additional pages as necessary.)
	a.	Landfill name:
	b.	Contact person:
	0.	Title:
		Phone: ()
		Contact is:Landfill OwnerLandfill Operator
	c.	Mailing address.
	C.	Street or P.O. Box:
	d.	City or Town: State: Zip: Landfill location.
	u.	Street or Route #:
		County:
		City or Town: State: Zip:
	0	City of TownState:Zip:
	e.	Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:
	f.	dry metric tons
	1,	List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the
		operation of this municipal solid waste landfill: Permit Number: Type of Permit:
		Permit Number: Type of Permit:
	σ	Does services cludes most applicable requirements in the Vincinia California March
	g.	Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9
		VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill? YesNo
	h.	
	11.	Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid
	i.	Waste Management Regulation, 9 VAC 20-80-10 et seq.? Yes No
	1,	Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill
		be watertight and covered? Yes No
		Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the
		week and time of the day sewage sludge will be transported.

SECTION C. LAND APPLICATION OF BULK SEWAGE SLUDGE

N/A

Complete this section for sewage sludge that is land applied unless any of the following conditions apply: The sewage sludge meets the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements and one of the vector attraction reduction options 1-8 (fill out B.4 instead) (EQ Sludge); or The sewage sludge is sold or given away in a bag or other container for application to the land (fill out B.5 instead); or You provide the sewage sludge to another facility for treatment or blending (fill out B.6 instead). Complete Section C for every site on which the sewage sludge that you reported in B.7 is land applied. 1. Identification of Land Application Site. Site name or number: b. Site location (Complete i and ii) Street or Route#: i. County: City or Town: _____ State: ___ Zip: Latitude: ____ Longitude: ii. Method of latitude/longitude determination ___ USGS map ____ Filed survey ____ Other Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) c. that shows the site location. 2. Owner Information. Are you the owner of this land application site? __Yes __No b. If no, provide the following information about the owner: Name: Street or P.O. Box: City or Town: _____ State: Zip: Phone: () 3. Applier Information: Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site? __Yes __No b. If no, provide the following information for the person who applies the sewage sludge: Name: Street or P.O. Box: City or Town: State: Zip: Phone: () List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the person c. who applies sewage sludge to this land application site: Permit Number: Type of Permit: Site Type. Identify the type of land application site from among the following: 4. __Agricultural land ___Reclamation site ___Forest ___Public contact site __Other. Describe 5. Vector Attraction Reduction. Are any vector attraction reduction requirements met when sewage sludge is applied to the land application site? Yes No If yes, answer a and b. Indicate which vector attraction reduction option is met: ___ Option 9 (Injection below land surface) __ Option 10 (Incorporation into soil within 6 hours) Describe, on this form or on another sheet of paper, any treatment processes used at the land application site b.

to reduce the vector attraction properties of sewage sludge:

FACILITY NAME: North Spring Behanoral Healthcare WWTP

VPDE ERMIT NUMBER: VA0067938

Cumulative Loadings and Remaining Allotments.

	(Complet	te Question 6 only if the - see instructions.)	the sewage sludge applied to this site since July 20, 1993 is subject to the cumulative pollutant loading rates
	a.	Have you contact	ted DEQ or the permitting authority in the state where the sewage sludge subject to the pplied to ascertain whether bulk sewage sludge subject to the CPLRs has been applied to the
		site since July 20), 1993?YesNo
			idge subject to the CPLRs may <u>not</u> be applied to this site.
			ne following information:
		Permitting author	rity:
		Contact person:	
		Phone:()	
	b.	1993?Yes _	inquiry, has bulk sewage sludge subject to the CPLRs been applied to this site since July 20No If no, skip the rest of Question 6. If yes, answer questions c - e.
	c.	Site size, in hecta	
	d.	sludge subject to sludge to this site	wing information for every facility other than yours that is sending or has sent sewage the CPLRs to this site since July 20, 1993. If more than one such facility sends sewage e, attach additional pages as necessary.
		Facility name:	
		Facility contact: Title:	
		Phone: ()	
		Mailing address.	
		Street or P.O. Bo	
			State: Zip:
	e.	Provide the total	loading and allotment remaining, in kg/hectare, for each of the following pollutants:
			Cumulative loading Allotment remaining
		Arsenic	
		Cadmium	No compared to the contract of
		Copper	ACCOUNTS OF THE PARTY OF THE PA
		Lead	W-II-A-Mandami, AMA-W-II-A-MANDAMI
		Mercury	
		Nickel	
		Selenium	
		Zinc	ACMINISTRAÇÃO DE CONTRACTOR DE
by these	questions n	nay be prepared as at	ou apply sewage sludge, or you are responsible for land application of sewage sludge. Information required tachments to this form. Skip the following questions if you contract land application to someone else (as onsible for the operation.
7.	Sludge of paramet	Characterization. Iter.	Use the table below or a separate attachment, provide at least one analysis for each
		PCBs (mg/kg)	
		pH (S. U.)	
		Percent Solids (%	
		Ammonium Nitro	
		Nitrate Nitrogen	
		Total Kjeldahl Ni	
		Total Phosphorus	
		Total Potassium ((mg/kg)

Lime treated sludge (10% or more lime by dry weight) should be analyzed for percent CaCO₃.

Alkalinity as CaCO₃* (mg/kg)

8. Storage Requirements.

Existing and proposed sludge storage facilities must provide an estimated annual sludge balance on a monthly basis incorporating such factors as storage capacity, sludge production and land application schedule. Include pertinent calculations justifying storage requirements.

Proposed sludge storage facilities must also provide the following information:

- a. A sludge storage site layout on a 7.5 minute topographic quadrangle or other appropriate scaled map to show the following topographic features of the surrounding landscape to a distance of 0.25 mile. Clearly mark the property line.
 - 1) Water wells, abandoned or operating
 - 2) Surface waters
 - 3) Springs
 - 4) Public water supply(s)
 - 5) Sinkholes
 - 6) Underground and/or surface mines
 - 7) Mine pool (or other) surface water discharge points
 - 8) Mining spoil piles and mine dumps
 - 9) Quarry(s)
 - 10) Sand and gravel pits
 - 11) Gas and oil wells
 - 12) Diversion ditch(s)
 - 13) Agricultural drainage ditch(s)
 - 14) Occupied dwellings, including industrial and commercial establishments
 - 15) Landfills or dumps
 - 16) Other unlined impoundments
 - 17) Septic tanks and drainfields
 - 18) Injection wells
 - 19) Rock outcrops
- b. A topographic map of sufficient detail to clearly show the following information:
 - 1) Maximum and minimum percent slopes
 - 2) Depressions on the site that may collect water
 - 3) Drainageways that may attribute to rainfall run-on to or runoff from this site
 - 4) Portions of the site (if any) which are located with the 100-year floodplain and how the storage facility will be protected from flooding
- c. Data and specifications for the storage facility lining material.
- d. Plan and cross-sectional views of the storage facility.
- e. Depth from the bottom of the storage facility to the seasonal high water table and separation distance to the permanent water table.
- 9. Land Area Requirements. Provide calculations justifying the land area requirements for land application of sewage sludge taking into consideration average soil productivity group, crop(s) to be grown and most limiting factor(s) of the sewage sludge, specifically Plant Available Nitrogen (PAN), Calcium Carbonate Equivalence (CCE), and metal loadings (CPLR sewage sludge only), where applicable. Relate PAN, CCE, and metal loadings to demonstrate the most limiting factor for land application.
- 10. Landowner Agreement Forms. Provide a properly completed Sewage Sludge Application Agreement Form (attached) for each landowner if sewage sludge is to be applied onto land not owned by the applicant.

Ground Wate	r Monitoring.
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Are any ground water monitoring data available for this land application site? __Yes __No If yes, submit the ground water monitoring data with this permit application. Also submit a written description of the well locations, approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.

12. Land Application Site Information.

(Complete Items a-d for sites receiving infrequent application - land application of sewage sludge up to the agronomic rate at a frequency of once in a 3 year period; complete Items a-h for sites receiving frequent application - land application of sewage sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year period)

- a. Provide a general location map for each county which clearly indicates the location of all the land application sites.
- b. For each land application site provide a site plan of sufficient detail to clearly show the concerned landscape features and associated buffer zones (See instructions). Provide a legend for each landscape feature and the net acreage for each field taking into account the proposed buffer zones.
- c. In order to ensure that land application of bulk sewage sludge will not impact federally listed threatened or endangered species or federally designated critical habitat, the applicant must notify the field office of the U.
 S. Department of the Interior, Fish and Wildlife Service (FWS), by a letter, the proposed land application activities with the identification of the land application sites. The address and phone number of FWS are provided below.

U. S. Fish and Wildlife Service Virginia Field Office P. O. Box 480 White Marsh, VA 23183 TEL: (804)693-6694

USDA-SCS soil survey map should be provided, if available.)

Provide a copy of the notification letter with this application form.

d. Provide a soil survey map, preferably photographically based, with the field boundaries clearly marked. (A

Provide a detailed legend for each soil survey map which uses accepted USDA-SCS descriptions of the typifying pedon for each soil series (soil type). Complex associations may be described as a range of characteristics. Soil descriptions shall include as a minimum the following information.

- 1) Soil symbol
- 2) Soil series, textural phase and slope range
- 3) Depth to seasonal high water table
- 4) Depth to bedrock
- 5) Estimated soil productivity group (for the proposed crop rotation)

Item e - h are required for sites receiving frequent application of sewage sludge

- e. In order to verify the information provided in item d, characterize the soil at each land application site.

 Representative soil borings or test pits to a depth of five feet or to bedrock if shallower, are to be coordinated for the typifying pedon of each soil series (soil type). Soil descriptions shall include as a minimum the following information:
 - 1). Soil symbol
 - 2). Soil series, textural phase and slope range
 - 3). Depth to seasonal high water table
 - 4). Depth to bedrock
 - 5). Estimated soil productivity group (for the proposed crop rotation)

f. Collect and analyze soil samples from each field, weighted to best represent each of the soil borings performed for Item e. Using the table below or a separate attachment, provide at least one analysis per sample for each of the following parameters.

Soil Organic Matter (%)

Soil pH (std. units)

Cation Exchange Capacity (meq/100g)

Total Nitrogen (ppm)

Organic Nitrogen (ppm)

Ammonia Nitrogen (ppm)

Nitrate Nitrogen (ppm)

Available Phosphorus (ppm)

Exchangeable Potassium (mg/100g)

Exchangeable Sodium (mg/100g)

Exchangeable Calcium (mg/100g)

Exchangeable Magnesium (mg/100g)

Arsenic (ppm)

Cadmium (ppm)

Copper (ppm)

Lead (ppm)

Mercury (ppm)

Molybdenum (ppm)

Nickel (ppm)

Selenium (ppm)

Zinc (ppm)

Manganese (ppm)

Particle Size Analysis or

USDA Textural Estimate (%)

- g. Relate the crop nutrient needs to anticipated yields, soil productivity rating and the various fertilizer or nutrient sources from sludge and chemical fertilizers. Describe any specialized agronomic management practices which may be required as a result of high soil pH. If the sludge is expected to possess an unusually high CCE or other unusual properties, provide a description of any plant tissue testing, supplemental fertilization or intensive agronomic management practices which may be necessary.
- h. Using a narrative format and referencing any related charts, describe the proposed cropping system. Show how the crop rotation and management will be coordinated with the design of the land application system. Include any supplemental fertilization program, soil testing and the coordination of tillage practices, planting and harvesting schedules and timing of land application.

FACILITY NAME: North Spring Beh. oral Healthcare WWTP

VPDE RMIT NUMBER: VA0067938

SEWAGE SLUDGE APPLICATION AGREEMENT

This refer	sewage sludge application agreement is made or	on this date, referred to here as the "Permittee".
Land	owner is the owner of agricultural land shown	on the map attached as Exhibit A and designated there as
certa by V	in permit requirements following application of PDES permit number wh	er's land"). Permittee agrees to apply and landowner agrees to comply with f sewage sludge on landowner's land in amounts and in a manner authorized ich is held by the Permittee.
condi publi	itioning to the property. Moreover, landowne	cation of sewage sludge will be beneficial in providing fertilizer and soil or acknowledges having been expressly advised that, in order to protect adhered to when sewage sludge receives Class B treatment for pathogen
1.	Food crops with harvested parts that touch not be harvested for 14 months after applic	the sewage sludge/soil mixture and are totally above the land surface shall ation of sewage sludge;
2.		surface of the land shall not be harvested for 20 months after application of nains on the land surface for four months or longer prior to incorporation
3.		surface of the land shall not be harvested for 38 months after application of nains on the land surface for less than four months prior to incorporation
4.	Food crops, feed crops, and fiber crops sha	ill not be harvested for 30 days after application of sewage sludge;
5.	Animals shall not be grazed on the land for	r 30 days after application of sewage sludge;
6.		s applied shall not be harvested for one year after application of the sewage n either land with a high potential for public exposure or a lawn, unless ntrol Board;
7.	Public access to land with a high potential sewage sludge;	for public exposure shall be restricted for one year after application of
8.	Public access to land with a low potential f sewage sludge.	for public exposure shall be restricted for 30 days after application of
9.		numulate cadmium, should not be grown on landowner's land for three years borne cadmium equal to or exceeding 0.5 kilograms/hectare (0.45)
speci		s designee of the proposed schedule for sewage sludge application and adowner's land. This agreement may be terminated by either party upon
	Landowner:	Permittee:
	Signature	Signature
	Mailing Address	Mailing Address

SECTION D. SURFACE DISPOSAL

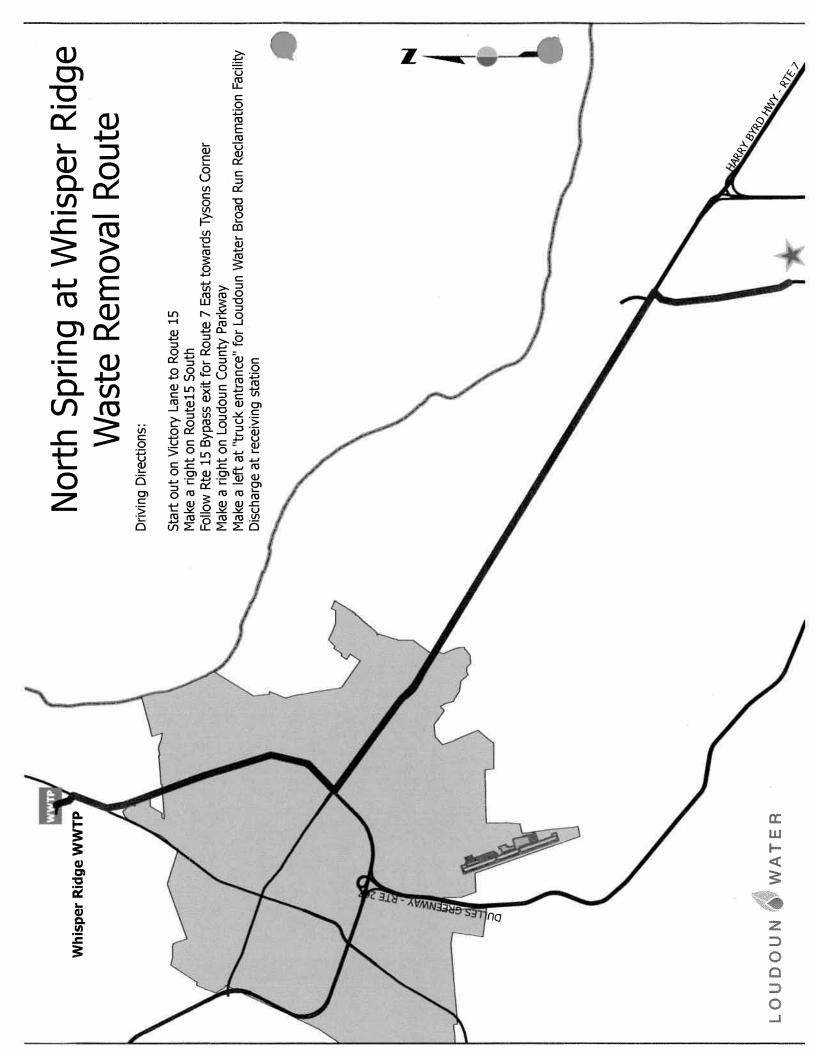
N/A

Complete this section only if you own or operate a surface disposal site. Provide the information for each active sewage sludge unit.

١.	Infori	nation on Active Sewage Sludge Units.
	a.	Unit name or number:
	b.	Unit location
		i. Street or Route#:
		County:
		City or Town: State: Zip:
		City or Town: State: Zip: ii. Latitude: Longitude:
		Method of latitude/longitude determination
		USGS map Filed survey Other
	c.	USGS map Filed survey Other Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable)
		that shows the site location.
	d.	Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period:dry metric tons.
	e.	Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit: dry metric tons.
	f.	Does the active sewage sludge unit have a liner with a minimum hydraulic conductivity of
		1 x 10 ⁻⁷ cm/sec?YesNo If yes, describe the liner or attach a description.
	~	
	g.	Does the active sewage sludge unit have a leachate collection system?YesNo If yes, describe the leachate collection system or attach a description. Also, describe the method used for
		leachate disposal and provide the numbers of any federal, state or local permits for leachate disposal:
		reactiate disposar and provide the numbers of any federal, state of focal permits for leachate disposar.
	h.	If you answered no to either f or g, answer the following:
	***	Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface
		disposal site?YesNo If yes, provide the actual distance in meters:
	i.	Remaining capacity of active sewage sludge unit, in dry metric tons: dry metric tons
		Anticipated closure date for active sewage sludge unit, if known: (MM/DD/YYYY)
		Provide with this application a copy of any closure plan developed for this active sewage sludge unit.
2.		ge Sludge from Other Facilities.
	Is sev	vage sludge sent to this active sewage sludge unit from any facilities other than yours?YesNo
		, provide the following information for each such facility, attach additional sheets as necessary.
	a.	Facility name:
	b.	Facility contact:
		Title:
		Phone: ()
	c.	Mailing address.
		Street or P.O. Box:
	1	City or Town: State: Zip:
	d.	List, on this form or an attachment, the facility's VPDES permit number as well as the numbers of all other
		federal, state or local permits that regulate the facility's sewage sludge management practices:
		Permit Number: Type of Permit:
	e.	Which class of pathogen reduction is achieved before sewage sludge leaves the other facility?
	٥.	Class AClass BNeither or unknown
	f.	Describe, on this form or on another sheet of paper, any treatment processes used at the other facility to
		reduce pathogens in sewage sludge:

FACILITY NAME: North Spring Beh. ral Healthcare WWTP

	g.	Which vector attraction reduction option is achieved before sewage sludge leaves the other facility? Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration) Option 4 (Specific oxygen uptake rate for aerobically digested sludge) Option 5 (Aerobic processes plus raised temperature) Option 6 (Raise pH to 12 and retain at 11.5) Option 7 (75 percent solids with no unstabilized solids) Option 8 (90 percent solids with unstabilized solids)
	h.	None or unknown Describe, on this form or another sheet of paper, any treatment processes used at the other facility to reduce vector attraction properties of sewage sludge:
	i.	Describe, on this form or another sheet of paper, any other sewage sludge treatment activities performed by the other facility that are not identified in e - h above:
3.	Vector	· Attraction Reduction.
	a.	Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit? Option 9 (Injection below land surface) Option 10 (Incorporation into soil within 6 hours) Option 11 (Covering active sewage sludge unit daily)
	b.	Describe, on this form or another sheet of paper, any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge:
1.	Groun	d Water Monitoring.
	a.	Is ground water monitoring currently conducted at this active sewage sludge unit or are ground water monitoring data otherwise available for this active sewage sludge unit?YesNo If yes, provide a copy of available ground water monitoring data. Also provide a written description of the well locations, the approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.
	b.	Has a ground water monitoring program been prepared for this active sewage sludge unit? YesNo If yes, submit a copy of the ground water monitoring program with this application.
	c.	Have you obtained a certification from a qualified ground water scientist that the aquifer below the active sewage sludge unit has not been contaminated?YesNo If yes, submit a copy of the certification with this application.
5.	Are yo	pecific Limits. Some seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit? Some seeking site-specific pollutant limits with this application.



PUBLIC NOTICE BILLING INFORMATION

AN 20 2010

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290.C.2.

Agent/Department to be billed:	J. Scott Zeiter
Owner:	North Spring Behavioral Healthcare
Applicant's Address:	42009 Victory Lane
	Leesburg, Virginia 20176
Agent's Telephone Number:	703-777-0800
Authorizing Agent:	Signature

VPDES Permit No. VA0067938 North Spring Behavioral Health Center

Please return to:

Susan Mackert VA-DEQ, NRO 13901 Crown Court Woodbridge, VA 22193-1453 Fax: (703)583-3853

PUBLIC NOTICE BILLING INFORMATION

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290.C.2.

Agent/Department to be billed:	Mr. David Winters
	Chief Executive Officer
Owner:	North Spring Behavioral Healthcare
Applicant's Address:	42009 Victory Lane
	Leesburg, VA 20176
Agent's Telephone Number:	(703) 777-0800
Authorizing Agent:	Juhnlin
	Signature

VPDES Permit No.: VA0067938

Facility Name: North Spring Behavioral Healthcare

WWTP

Please return to:

Susan Mackert VA-DEQ, NRO 13901 Crown Court Woodbridge, VA 22193-1453 Fax: (703)583-3821



PO BOX 4000 | 44865100000 A VARTH IVAN | ASHRUPE VA 20140 TEL 576 194 7750 | FAX 571 283 2910

RECEIVED

JUL 1 4 2009

DEPT. OF ENVIRONMENTAL QUALITY-NRO

July 10, 2009

Ms. Susan Mackert Department of Environmental Quality Northern Virginia Regional Office 13901 Crown Court Woodbridge, Virginia 22193

Re: North Spring at Whisper Ridge VPDES VA0067938 Permit Reissuance Application

Dear Ms. Mackert:

Please find attached our application for reissuance of our VPDES permit VA0067938 for the North Spring at Whisper Ridge Wastewater Treatment Facility. We have provided two copies should you need to have multiple reviewers.

The current permit was prepared with a design flow of 10,000 gpd. During the past several months, additional flow has been passing through the wastewater treatment facility with minimal additional loading. We are interested in understanding the potential impacts to the operations permit if the system was re-rated for 15,000 gpd. We have significant quantities of data that show the plant is hydraulically able to pass this much water without a degradation to the effluent quality. The owners of the North Spring are attempting to reduce the flow rate through water conservation and other measures. Should they not be able to bring flows down to below, 10,000 gpd, a new flow tier or a re-rating of the facility would be required. We are interested in working with you to understand the potential ramifications of this change.

As you begin reviewing this application, please call me at 571-291-7835 so that we may discuss this request and its implications. Thank you.

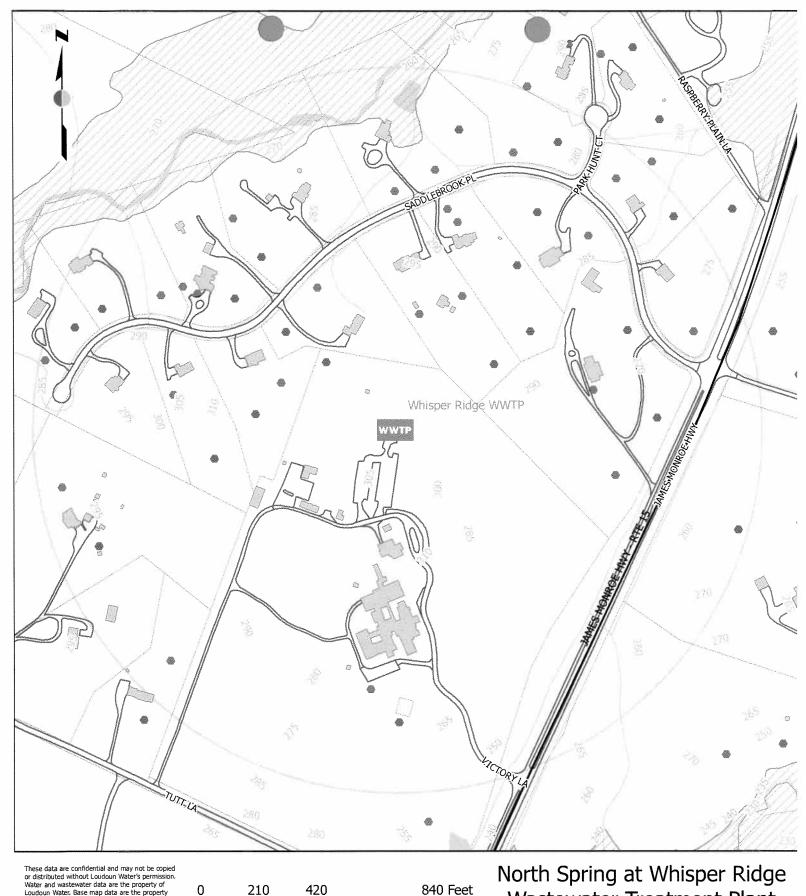
Sincerely,

Todd A. Danielson, P.E., BCEE Manager of Community Systems

Attachment

fill—in areas are spaced for elite type, i.e., 12 ch.				Form Appro	OIVIB 140, 2040-0066.			
FORM				ATION AGENCY	I, EPA I.D. NUMBER		TT	TIAC
I SEPA co	GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)				F		,	D 14 13
GENERAL REAL TEMS	1	7	1	11111	GENERAL INSTRU			
I. EPA I.D. NUMBER	/	/,	//,	///////////////////////////////////////	If a preprinted label has be it in the designated space. I	Review	v the	inform-
+++++++	/,	/)	///	///////////////////////////////////////	ation carefully; if any of it through it and enter the c			
III. FACILITY NAME	1)	1	///	///////////////////////////////////////	appropriate fill-in area belo the preprinted data is abser	w. A	lso, if	any of
FACILITY	/	/	//	11111	left of the label space list	s the	infor	rmation
MAILING ADDRESS PLEASE PLA	ACE	LA	BEL IN	THIS SPACE	that should appearl, please proper fill—in area(s) belo	w. If	the	label is
+++++	1	/	//.	///////	complete and correct, you Items I, III, V, and VI (e	need	VI-B	mplete
111111111111	1	/,	//,	////////	must be completed regard items if no label has been	less).	Comp	olete all
VI FACILITY	/,	1,	///	1//////	the instructions for deta- tions and for the legal au	ted i	tem	descrip-
(////X//////	//	1	///	11111	which this data is collected.	-	o cioni	, onder
II. POLLUTANT CHARACTERISTICS	1						٥	
MOTOMOTIONS: Complete A through I to determine y	vheth	er vo	u need to	submit any permit application	n forms to the EPA. If you ans	ver "	res" to	any
the sale of the sale of the second sale of the seco	tal to	erm lu	etad in the	narentnesis tollowing the uui	SLIBH, WILL A HILLIE DUA III	THE CH	11 4 50	I CHILLIAN
if the supplemental form is attached. If you answer "no' is excluded from permit requirements; see Section C of the	to p	arn n	HPSTIAR VI	nu need not submit any ut the	26 Initill? I on may amoved mo	y .	Jul av	LIVILY
	Lineti		K'X'			-	MARI	K 'X'
SPECIFIC QUESTIONS	YES	NO	ATTACHED		OUESTIONS	YES	NG	ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.?	x		х	include a concentrated	(either existing or proposed) animal feeding operation or		x	
(FORM 2A)	16	17	31	discharge to waters of the		14	20	21
C. Is this a facility which currently results in discharges		X		D. Is this a proposed facility	y lother than those described will result in a discharge to		Х	
to waters of the U.S. other than those described in A or B above? (FORM 2C)	22	23	24	waters of the U.S.? (FOF	RM 2D)	25	26	27
E. Does or will this facility treat, store, or dispose of		x		municipal effluent below	ct at this facility industrial or w the lowermost stratum con-	1	x	
hazardous wastes? (FORM 3)				taining, within one que	arter mile of the well bore, drinking water? (FORM 4)	11	31	3)
G. Do you or will you inject at this facility any produced	2.0	29	20	H Do you or will you inje	et at this facility fluids for spe-	1		
water or other fluids which are brought to the surface in connection with conventional oil or natural gas pro-		X		cial processes such as n	nining of sulfur by the Frasch g of minerals, in situ combus-		X	
duction, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid		1000		tion of fossil fuel, or re	covery of geothermal energy?	9		
hydrogarbons? (FORM 4)	34	35	36	(FORM 4)	ed stationary source which is	37	3.0	39
 Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the in 			V	NOT one of the 28 inc	dustrial categories listed in the will potentially emit 250 tons		x	
structions and which will potentially emit 100 ton- per year of any air pollutant regulated under the	3	X		per year of any air pollu	tant regulated under the Clean	3	^	
Clean Air Act and may affect or be located in an attainment area? (FORM 5)		- 41	42	Air Act and may affect area? (FORM 5)	or be located in an attainment	43	44	45 99
III NAME OF FACILITY								
North Spring Behavioral Health Cente	r Wa	astev	vater Tre	eatment Plant				
15 16 - 29 30	7	gary.		1-		69		15.4
IV. FACILITY CONTACT	first i	title		1000年,中华山地中的,1966	B. PHONE (area code & no.)		t.	WILL S
	1 1	-	i i i	57	1 291 7700			
Dale Hammes, General Manager					- 48 29 - 51 52 - 51			146
V. FACILITY MAILING ADDRESS								
A. STREET OR P.C	. во:	×						
3 P.O. Box 4000								
B. CITY OR TOWN		-	HAT Into	C.STATE D. ZIP CO	DDE			
c	1 7	1	1 1 1	VA 20146	The state of the s			
4 Ashburn				* * * * * * * * * * * * * * * * * * *	-tar			2
VI. FACILITY LOCATION								
A STREET, ROUTE NO. OR OTHER	SPE	CIFIC	IDENTIF	TER				
5 42009 Victory Lane		0						
15 10 B. COUNTY NAME				A5.				
	1	1: 1:	1: 1: 1:					
Loudoun				70	L COUNTY COOF			100
C. CITY OR TOWN		100	1 1	D.STATE E. ZIP C	DDE F. COUNTY CODE			
6 Leesburg	- Ti	20 _ 20 20 _ 20	2 2 2 2	VA 20176				
13 15	_			40 41 42 47	31 32 - 34	7		

SIC CODES (4-digit, in order of priority)			- HONE AND ADDRESS SHEET AND THE STREET
A. FIRST		c T T /s	B. SECOND specify)
1952 (specify) Sewage System		7 N/A	N/A
C. THIRD		1:115 - 121	D. FOURTH
(specify)		7 N/A (5	specify)
N/A N/A		15 16 - 19	N/A
OPERATOR INFORMATION			B. Is the name II
	A NAME	TTTTT	Item VIII-A a
Loudoun County Sanitation Authorit	у	_	X YES
16		<u> </u>	33 66
C. STATUS OF OPERATOR (Enter the up		CONTRACTOR OF THE PARTY OF THE	
= FEDERAL M = PUBLIC (other than its STATE O = OTHER (specify)	n federal or state) M	specify)	A 571 291 7700
= PRIVATE	36		15 16 - 18 19 - 21 22 -
	OR P.O. BOX	11111	
P.O. Box 4000			
F. CITY OR TO	wn	G.STATE	H. ZIP CODE IX. INDIAN LAND
			Is the facility located on Indian lands?
Ashburn			20146
16 .	Little Parki	40 A1 42 4	or the contract of Section 1997
A. NPDES (Discharges to Surface Water)	D. PSD (Air Emission	is from Proposed Son	urces)
THE THE PART OF T	1 211111	11111	
N VA0067938	9 P N/A		1 10
B. UIC (Underground Injection of Fluids)		ER (specify)	TELLINE IMPROPERSALE TO THE SECOND SECOND
Ü N/A	9 N/A	1 1 1 1 1 1	(specify)
16 17 18	30 14 16 17 11		30
C. RCRA (Hazardous Wastes)	E, OTH	ER (specify)	(specify)
R N/A	9 N/A		17.4
. MAP	30 15 15 17 18		40
ne outline of the facility, the location of reatment, storage, or disposal facilities,	f each of its existing and and each well where it in	proposed intake a jects fluids underg	le beyond property bounderies. The map must sho and discharge structures, each of its hazardous was ground. Include all springs, rivers and other surfa
rater bodies in the map area. See instructi	ons for precise requiremen	nts.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
I. NATURE OF BUSINESS (provide a brief de	scription)		
he Loudoup County Sanitation Author	rity is a public body pol	itic and cornorate	e created under the provisions of the Virginia
Vater and Sewer Authorities Act for th	e purpose of providing	public water and	I sewer to unincorporated areas within Loudo
County, Virginia, The North Spring Be	havioral Health Center	Wastewater Trea	atment Plant is and operated by the LCSA,
and it treats sewage flow from the Nor	th Spring Behavioral He	eaith Center.	
			1.0
III. CERTIFICATION (see instructions)			
III. CERTIFICATION (see instructions)	e personally examined and	d am familiar with	the information submitted in this application and
I certify under penalty of law that I have attachments and that, based on my inq application, I believe that the information	uiry of those persons im on is true, accurate and co	omplete. I am awa	are that there are significant penalties for submitt
I certify under penalty of law that I have	uiry of those persons im on is true, accurate and co	omplete. I am awa nt.	are that there are significant penalties for submitt



These data are confidential and may not be copied or distributed without Loudoun Water's permission. Water and wastewater data are the property of Loudoun Water. Base map data are the property of Loudoun County Office of Mapping and Geographic Information (all rights reserved).

These data and all maps thereby derived are considered best available information and are provided "as-is" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular

Prepared by the Loudoun Water GIS Department; please report errors and updates to: GISSupport@loudounwater.org.

840 Feet 210 420 1 inch = 350 feet

Wastewater Treatment Plant June 2009

- Well
- Potential Pollution Source 5 Ft Contours

WWTP Treatment Plant 100 Yr Floodplain

1/4 Mile Buffer

LOUDOUN WATER

VPDES Permit Application Addendum

1.	Entity to whom the permit is to be issued: <u>Loudoun County Sanitation Authority</u> Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.
2.	Is this facility located within city or town boundaries? Y/N
3.	Provide the tax map parcel number for the land where the discharge is located. PIN 185273670
4.	For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? $\underline{0}$
5.	What is the design average effluent flow of this facility? <u>0.010</u> MGD For industrial facilities, provide the max. 30-day average production level, include units: <u>N/A</u>
	In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? $(\hat{\mathbf{y}})/N$
	If "Yes", please identify the other flow tiers (in MGD) or production levels: <u>See attached explanation</u> Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?
6.	Nature of operations generating wastewater: Domestic discharge from commercial/industrial operations
	% of flow from domestic connections/sources
	Number of private residences to be served by the treatment works:
	100 % of flow from non-domestic connections/sources
7.	Mode of discharge:Continuous _X_IntermittentSeasonal
	Describe frequency and duration of intermittent or seasonal discharges:
8.	Identify the characteristics of the receiving stream at the point just above the facility's discharge point:
	Permanent stream, never dry
	X Intermittent stream, usually flowing, sometimes dry
	Ephemeral stream, wet-weather flow, often dry Effluent-dependent stream, usually or always dry without effluent flow
	Lake or pond at or below the discharge point Other:
9.	Approval Date(s):
- •	O & M Manual July 13, 1988 Sludge/Solids Management Plan July 11, 1988
	Have there been any changes in your operations or procedures since the above approval dates? Y

North Spring Behavioral Health Center WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

FORM

2A NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. Basic Application Information for all Applicants. All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd. All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. Certification. All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. Expanded Effluent Testing Data. A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. Toxicity Testing Data. A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. Industrial User Discharges and RCRA/CERCLA Wastes. A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. Combined Sewer Systems. A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

FACILITY NAME AND PERMIT NUMBER:

North Spring Behavioral Health Center WWTP; VA0067938

BASIC APPLICATION INFORMATION

		ICATION INFORMATION FOR ALL A		
	·····	complete questions A.1 through A.8 of this	Basic Application Information packet	
A.1.	Facility Information			
	Facility name	North Spring Behavioral Health Cer	nter WWTP	
	Mailing Address	P.O. Box 4000		
		Ashburn, VA 20146		
	Contact person	Dale C. Hammes		
	Title	General Manager		
	Telephone number	571-291-7700		
	Facility Address	42009 Victory Lane		
	(not P.O. Box)	Leesburg, VA 20176		
A.2.	Applicant Informati	on. If the applicant is different from the above,	provide the following:	
	Applicant name	Loudoun County Sanitation Authori	ty	
	Mailing Address	P.O. Box 4000		
		Ashburn, VA 20146		
	Contact person	Todd Danielson		
	Title	Manager, Community Systems		
	Telephone number	571-291-7835		
	Is the applicant the	owner or operator (or both) of the treatmen	it works?	
	owner	X operator		
	Indicate whether corr	respondence regarding this permit should be dir	ected to the facility or the applicant.	
	radiity	applicant		
A.3.	Existing Environme (include state-issued	ental Permits. Provide the permit number of ar permits).	ny existing environmental permits that hav	e been issued to the treatment works
	NPDES VA0067	938	_{PSD} N/A	
	uic N/A		Other N/A	
	RCRA N/A		Other N/A	
A.4.		Information. Provide information on municipali provide information on the type of collection systems.		
	Name	Population Served	Type of Collection System	Ownership
	North Spring	approx. 60	separate sanitary,	North Spring
			w/kitchen grease trap	
	Total po	pulation served approx. 60	*	
	-			

North Spring Behavioral Health Center WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

A.5.	Indian Country.		<u> </u>		
	a. Is the treatment works located in Indian Co.	ıntry?			
	YesX No				
	b. Does the treatment works discharge to a re	ceiving water that is either	in Indian Country or that is ເ	ipstream from (and	eventually flows
	through) Indian Country?				
	YesXNo				
A.6.	Flow. Indicate the design flow rate of the treatment daily flow rate and maximum daily flow rate for emonth of "this year" occurring no more than three	each of the last three years	. Each year's data must be		
	a. Design flow rate mgd				
		Two Years Ago	Last Year	This Year	
	b. Annual average daily flow rate	0.0083	0.0088	0.010	7 mgd
	c. Maximum daily flow rate	0.0180	0.0196	0.0212	2 mgd
	Called the Contain Ladie to the America Section			. !! 45 - 4 1	-6 1- 4 1
A.7.	Collection System. Indicate the type(s) of col contribution (by miles) of each.	ection system(s) used by t	ne treatment plant. Check a	all that apply. Also e	estimate the percent
	X Separate sanitary sewer			100	%
	Combined storm and sanitary sewer			~0~	
	Combined storm and samilary sewer				
A.8.	Discharges and Other Disposal Methods.				
	a. Does the treatment works discharge effluer	it to waters of the U.S.?		X Yes	No
	If yes, list how many of each of the followin	g types of discharge points	the treatment works uses:		
	i. Discharges of treated effluent				~1~
	ii. Discharges of untreated or partially trea	ited effluent		****	~0~
	iii. Combined sewer overflow points				~0~
	iv. Constructed emergency overflows (price	r to the headworks)		_	~0~
	v. Other			_	~0~
	b. Does the treatment works discharge efflue		r surface impoundments	Voo	X No
	that do not have outlets for discharge to wa			Yes	No
	If yes, provide the following for each surfact Location:	e impoundment.			
	Annual average daily volume discharged to	surface impoundment(s)			mgd
	Is discharge continuous or				
			•••		
	c. Does the treatment works land-apply treate	d wastewater?		Yes	No
	If yes, provide the following for each land a	oplication site:			
	Location:				
	Number of acres:				
	Annual average daily volume applied to site	***************************************	Mgd		
	Is land application continu	ous or inte	rmittent?		
	d. Does the treatment works discharge or transtreatment works?	sport treated or untreated v	wastewater to another	Yes	X No



North Spring Behavioral Health Center WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

If transport is by a part	ty other than the applicant, provide:			
Transporter name:	N/A			
Mailing Address:				
Contact person:	N/A		***************************************	*****
Title:				
Telephone number:				
For each treatment wo	orks that receives this discharge, provide the following:			
Name:	N/A			
Mailing Address:				

Contact person:				
Contact person:				
Title:				
Title: Telephone number:	NPDES permit number of the treatment works that receives this discharge.			
Title: Telephone number: If known, provide the I	NPDES permit number of the treatment works that receives this discharge. laily flow rate from the treatment works into the receiving facility.			mg
Title: Telephone number: If known, provide the I Provide the average d Does the treatment wo	•	Yes	X	mg
Title: Telephone number: If known, provide the I Provide the average d Does the treatment wo A.8.a through A.8.d at	laily flow rate from the treatment works into the receiving facility.	Yes	_X	
Title: Telephone number: If known, provide the I Provide the average d Does the treatment wo A.8.a through A.8.d at If yes, provide the follow	laily flow rate from the treatment works into the receiving facility. orks discharge or dispose of its wastewater in a manner not included in bove (e.g., underground percolation, well injection)?	Yes	_X	_ mg

North Spring Behavioral Health Center WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

	escription of Outfall.	004		
a.	Outfall number	001	-	
b.	Location	Leesburg		20175
		(City or town, if applicable) Loudoun		(Zip Code) VA
		(County) 39 degrees 08' 56"		(State) 77 degrees 32' 52"
		(Latitude)	-4 -4	(Longitude)
C.	Distance from shore (i	f applicable)	at shore	_ ft.
d.	Depth below surface (if applicable)	0	_ ft.
e.	Average daily flow rate)	0.0107	_ mgd
f.	Does this outfall have discharge?	either an intermittent or a periodic	V	
	· ·		X Yes	No (go to A.9.g.)
	If yes, provide the follo	owing information:		
	Number of times per y	rear discharge occurs:	daily, 365 days	
	Average duration of ea	ach discharge:	intermittent	
	Average flow per disch	narge:	0.0005	mgd
	Months in which disch	narge occurs:	varies, Jan-Dec	
g.	Is outfall equipped with	h a diffuser?	Yes	X No
10. D€	escription of Receiving	g Waters.		
a.	Name of receiving wat	Limestone Brai	nch UT	
b.	Name of watershed (if	known)	Middle Potomac-Cato	octin
	United States Soil Cor	nservation Service 14-digit waters	hed code (if known):	
C.	Name of State Manag	ement/River Basin (if known):	Potomac	River
0.	s.iio oi oidio ivallagi	emental badin (in idiowity.		00070000
	United States Geologic	cal Survey 8-digit hydrologic catal	oging unit code (if known):	02070008
d.	Critical low flow of rec	eiving stream (if applicable):		
	acute	cfs	chronic	cfs
	Total hardness of rece	to the months and the set form the set of th	applicable):	mg/Lof CaCO _o

A.11. Descrip	tion of Tre	eatment.									
a. Wha	at levels of	treatment are	provide	ed? Che	eck all that a	pply.					
	Pı	rimary		X	Sec	ondar	у				
***************************************	Ad	dvanced			Oth	er. D	Describe:	***************************************			***************************************
b. Indi	cate the fol	lowing remov	al rates	(as app	olicable):						
Des	ign BOD ٍ i	removal <u>or</u> De	esign Cl	BOD re	emoval				85	%	
	ign SS rem			3					85	%	
Des	ign P remo	oval						***************************************	N/A	 %	
	ign N remo								N/A	%	
	NIL.	13-N						***************************************	85	······································	
Oth				-						%	
		isinfection is n/dechlori			fluent from th	his out	tfall? If disin	fection varies b	y season, plea	ase describe.	
lf di	sinfection i	s by chlorina	tion, is d	echlori	nation used t	for this	s outfall?		X Y	es	No
d. Doe	s the treatr	ment plant ha	ve post	aeratior	า?				X Y	es	No
			·								
Outfall r	number:	TER	00		MAXIMUM D	OAILY	VALUE	1	A\'E	RAGE DAILY VA	LUE
	IAMANIE	ILIX			/alue		Units	Valu	all remove a main depute per la rechante de la constantina del constantina de la constantina de la constantina del constantina de la constantina de la constantina de la constantina de la constantina del constantina	Units	Number of Samples
	·						Onto		ie	Office	
pH (Minimum)				6.3			s.u.	7.7		S.U.	851
pH (Maximum)			8.7			s.u.	0.00	200		851
Flow Rate		***		0.02		- M	IGD	0.00		MGD	851
Temperature (Winter)			11			<u>C</u>	14.1		C	483
Temperature (oort a minimu	m and a	25		110	<u>C</u>	22.5	0	<u>C </u>	368
	LLUTANT				M DAILY	lue	AVERAC	SE DAILY DIS	CHARGE	ANALYTICAL METHOD	ML / MDL
			Co	nc.	Units		Conc.	Units	Number of Samples		
CONVENTION	AL AND N	ONCONVEN	ITIONA	L COMI	POUNDS.					<u></u>	
BIOCHEMICAL	OXYGEN	BOD-5	17	.0	mg/L		2.7	mg/L	28	N/A	5.0
DEMAND (Repo	ort one)	CBOD-5	N/	A	N/A		N/A	N/A	N/A	N/A	N/A
FECAL COLIFC)RM		1.	0	N/CML		1.0	N/CML	5	Hach 836	3 1.0
TOTAL SUSPE	NDED SOL	.IDS (TSS)	25	5.2	mg/L		7.1	mg/L	28	2540 D.	1.0
REFER T	ГО ТНЕ	E APPLI	CATI	ON C	OVERVI	EW				OTHER PA	RTS OF FORM

North Spring Behavioral Health Center WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day). All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification). B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration. Briefly explain any steps underway or planned to minimize inflow and infiltration. B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire a. The area surrounding the treatment plant, including all unit processes. b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable. c. Each well where wastewater from the treatment plant is injected underground. d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant. e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed. B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g. chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram. B.4. Operation/Maintenance Performed by Contractor(s). Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a ____Yes ____No If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary). Mailing Address: Telephone Number: Responsibilities of Contractor: B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or

uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.) auttall a

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedu	₹.	List the outfall	number (as	ssigned in q	uestion A.9)	for each	outfall that is	covered by	this impleme	ntation schedul
--	----	------------------	------------	--------------	--------------	----------	-----------------	------------	--------------	-----------------

Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

FACILITY NAME AND PERMIT NUMBER:

North Spring Behavioral Health Center WWTP; VA0067938

С	If the answer to B.5.	b is "Yes," briefly	y describe, includi	ng new maximum	daily inflow rat	e (if applicable).		
d.		lanned independ	lently of local, Sta				tion steps listed below completion dates, as a	
			Schedule	Ac	tual Completion	1		
	Implementation Stag	ge	MM / DD / \	YYYY MM	/ DD / YYYY			
	Begin construction	n		1	1			
	 End construction 				_//			
	– Begin discharge				_//			
	- Attain operational	level]			
e.	Have appropriate pe	ermits/clearances	s concerning other	r Federal/State re	quirements bee	n obtained?	YesNo	
	Describe briefly:							
	_							
···								
B.6. EFI	FLUENT TESTING D	ATA (GREATE	R THAN O.1 MGE	ONLY).				
da ad ar	is section. All informa ata must comply with (ddressed by 40 CFR F nd one-half years old. utfall Number:	QA/QC requirem Part 136. At a mi	ents of 40 CFR Pa	art 136 and other	appropriate QA	VQC requirements	s for standard method	s for analytes not
	POLLUTANT		JM DAILY	AVERAG	SE DAILY DISC	HARGE		
,	022017111	DISC	HARGE					
		Conc.	Units	Conc.	Units	Number of Samples	ANALYTICAL METHOD	ML / MDL
CONVEN	NTIONAL AND NONC	ONVENTIONAL	COMPOUNDS.					
AMMON	IA (as N)							
	NE (TOTAL AL, TRC)							
DISSOL	VED OXYGEN							:
	KJELDAHL EN (TKN)							
	E PLUS NITRITE							
	GREASE							
PHOSPI	HORUS (Total)							
TOTAL I	DISSOLVED (TDS)							
OTHER								
REF	ER TO THE A	PPLICATION		END OF PA		E WHICH C	THER PART	S OF FORM

2A YOU MUST COMPLETE

North Spring Behavioral Health Center WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

BASIC APPLICATION INFORMATION											
PART C. CERTIFICATION											
applicants must complete all ap	plicable sections of Form By signing this certification	Refer to instructions to determine who is an officer for the purposes of this certification. All 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have on statement, applicants confirm that they have reviewed Form 2A and have completed all sections nitted.									
Indicate which parts of I	Form 2A you have com	pleted and are submitting:									
X Basic Application I	nformation packet	Supplemental Application Information packet:									
		Part D (Expanded Effluent Testing Data)									
		Part E (Toxicity Testing: Biomonitoring Data)									
		Part F (Industrial User Discharges and RCRA/CERCLA Wastes)									
		Part G (Combined Sewer Systems)									
ALL APPLICANTS MUST CO	MPLETE THE FOLLOW	/ING CERTIFICATION.									
to assure that qualified personn system or those persons direct	nel properly gather and ev ly responsible for gatherin	attachments were prepared under my direction or supervision in accordance with a system designed raluate the information submitted. Based on my inquiry of the person or persons who manage the ng the information, the information is, to the best of my knowledge and belief, true, accurate, and is for submitting false information, including the possibility of fine and imprisonment for knowing									
Name and official title		General Manager									
Signature	Nace	C. Hanne									
Telephone number	571-291-7700										
Date signed	7/10	0/09									
Upon request of the permitting or identify appropriate permittin	authority, you must subm ng requirements.	nit any other information necessary to assess wastewater treatment practices at the treatment works									

SEND COMPLETED FORMS TO:

North Spring Behavioral Health Center WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number:									the United St	ales.)	
POLLUTANT	1	AXIMU DISCH	IM DAIL` IARGE	•	A\	/ERAGE	: DAILY	DISCHA	ARGE		
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL
METALS (TOTAL RECOVERABLE), C	YANIDE, I	PHENOL	S, AND H	ARDNES	S.		·				
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS CaCO ₃)											
Use this space (or a separate sheet) t	o provide i	nformatio	on on othe	r metals	requested	by the pe	ermit write	er.		-	1
	+	1				1					

									United State	es.)	
POLLUTANT	1		JM DAIL` HARGE	Y	A۱	/ERAGE	DAILY	DISCHA	ARGE		
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL
VOLATILE ORGANIC COMPOUNDS.			·	4							
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYLVINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

Outfall number:	(Complete once for each outfall dischar					discharging effluent to waters of the United States.)						
POLLUTANT	١		IM DAILY IARGE	′	A۱	-	DAILY					
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL	
1,1,1-TRICHLOROETHANE												
1,1,2-TRICHLOROETHANE												
TRICHLORETHYLENE												
VINYL CHLORIDE												
Use this space (or a separate sheet) to	provide in	formatio	n on other	volatile o	rganic cor	npounds	requested	d by the p	permit writer.			
ACID-EXTRACTABLE COMPOUNDS		<u> </u>	L	I	L	1	I	L				
P-CHLORO-M-CRESOL												
2-CHLOROPHENOL												
2,4-DICHLOROPHENOL												
2,4-DIMETHYLPHENOL												
4,6-DINITRO-O-CRESOL												
2,4-DINITROPHENOL												
2-NITROPHENOL												
4-NITROPHENOL												
PENTACHLOROPHENOL												
PHENOL												
2,4,6-TRICHLOROPHENOL												
Use this space (or a separate sheet) to	provide ir	nformatio	n on othe	r acid-exti	ractable co	mpound	s requeste	ed by the	permit writer.		4	
BASE-NEUTRAL COMPOUNDS.	.1	<u></u>	1	1		1	1					
ACENAPHTHENE												
ACENAPHTHYLENE												
ANTHRACENE												
BENZIDINE												
BENZO(A)ANTHRACENE												

FACILITY NAME AND PERMIT N				roved 1/14/99 ber 2040-0086				
BENZO(A)PYRENE								
	į							

Outfall number:									United State	es.)	
POLLUTANT			JM DAIL` HARGE	Y	A۱	/ERAGE	DAILY	DISCH	ARGE		
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL
3,4 BENZO-FLUORANTHENE											
BENZO(GHI)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											

1,2-DIPHENYLHYDRAZINE											
FACILITY NAME AND PERMIT	NUMBER:										oved 1/14/99 per 2040-0086
North Spring Behavioral H	ealth Ce	enter V	VWTP;	VA006	57938					OMB Numb	ger 2040-0086
Outfall number:	(Comple	te once	for each	outfall di	scharging	g effluen	t to wate	rs of the	United State	98.)	
POLLUTANT	1		IM DAIL'	1	A۱	/ERAGE	DAILY	DISCHA	ARGE		
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/ MDL
FLUORANTHENE									Odmpies		
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO- PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE										-	
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE								<u> </u>	<u> </u>		
Use this space (or a separate sheet)	to provide i	nformatio	on on othe	er base-ne	eutral com	pounds re	equested	by the pe	rmit writer.		
Use this space (or a separate sheet)	to provide i	nformatic	on on othe	er pollutan	ts (e.a. n	esticides)	requeste	d by the	permit writer.		
Coo and space (of a separate sitest)			T	F =	(=-5-, F-	1	1	T			
			<u></u>						<u> </u>		
REFER TO THE AP	PLICA'	TION	OVE		D OF W TO			NE W	нісн о	THER PART	S OF FORM

2A YOU MUST COMPLETE

North Spring Behavioral Health Center WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

complete.	Complete Fait E. Refer to the Applicat	LIOH OVERVIEW FOR GRECUIONS OF WHICH OF	iei sections of the total to
E.1. Required Tests.			
Indicate the number of whole effl	uent toxicity tests conducted in the pa	st four and one-half years.	
E.2. Individual Test Data. Complete the		toxicity test conducted in the last four a	
Column per teet (where easily operate t	Test number:	Test number:	Test number:
a. Test information.			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			
b. Give toxicity test methods followed	d.		
Manual title			
Edition number and year of publication			
Page number(s)			
c. Give the sample collection method	d(s) used. For multiple grab samples,	indicate the number of grab samples u	sed.
24-Hour composite			
Grab			
d. Indicate where the sample was ta	ken in relation to disinfection. (Check a	all that apply for each)	
Before disinfection			
After disinfection			
After dechlorination			

·orm	Approve	d 1/14/99
DMB	Number	2040-0086

	Test number:	Test number:	Test number:	
e. Describe the point in the treatment process at which the sample was collected.				
Sample was collected:				
f. For each test, include whether the	test was intended to assess chronic to	oxicity, acute toxicity, or both.		
Chronic toxicity				
Acute toxicity				
g. Provide the type of test performed	1.			
Static				
Static-renewal				
Flow-through				
h. Source of dilution water. If labora	atory water, specify type; if receiving wa	ater, specify source.		
Laboratory water				
Receiving water				
i. Type of dilution water. It salt wate	er, specify "natural" or type of artificial s	sea salts or brine used.		
Fresh water				
Salt water				
j. Give the percentage effluent used	I for all concentrations in the test series	S.		
k. Parameters measured during the	test. (State whether parameter meets	test method specifications)		
рН				
Salinity				
Temperature				
Ammonia				
Dissolved oxygen				
I. Test Results.				
Acute:		1		
Percent survival in 100% effluent	%	. %	%	
LC ₅₀				
95% C.I.	%	%	%	
Control percent survival	%	%	%	
Other (describe)				

FACILITY NAME AND PERMIT NUMBER:

North Spring Behavioral Health Center WWTP; VA0067938

Chronic:			
NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			
m. Quality Control/Quality Assurance	ce.		
Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			
E.3. Toxicity Reduction Evaluation. Is	the treatment works involved in a Toxi	city Reduction Evaluation?	
YesNo If yes	, describe:		
E.4. Summary of Submitted Biomonito of toxicity, within the past four and or results.		submitted biomonitoring test informatio ormation was submitted to the permitti	
Date submitted:	(MM/DD/YYYY)		
Summary of results: (see instruction	ns)		

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER:

North Spring Behavioral Health Center WWTP; VA0067938

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

	lete Part F.
GEN	IERAL INFORMATION:
F.1.	Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?
	YesNo
F.2.	Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.
	a. Number of non-categorical SIUs.
	b. Number of CIUs.
SIG	NIFICANT INDUSTRIAL USER INFORMATION:
	ly the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and de the information requested for each SIU.
F.3.	Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.
	Name:
	Mailing Address:
F.4.	Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.
F.5.	Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.
	Principal product(s):
	Raw material(s):
F.6.	Flow Rate.
	 a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.
	gpd (continuous orintermittent)
	 Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.
	gpd (continuous orintermittent)
F.7.	Pretreatment Standards. Indicate whether the SIU is subject to the following:
	a. Local limitsYesNo
	b. Categorical pretreatment standardsYesNo
	If subject to categorical pretreatment standards, which category and subcategory?

FACILITY NAME AND PERMIT NUMBER:

North Spring Behavioral Health Center WWTP; VA0067938

	YesNo	If yes, describe	each episode.				
							_
CR.	A HAZARDOUS W	ASTE RECEIVED B	BY TRUCK, RAIL, OR DEDIC	CATED PIPE	LINE:		
9.	RCRA Waste. Does the		eive or has it in the past three year	rs received RCF	RA hazardous wa	aste by truck, rail, o	or dedicated pipe?
10.	Waste Transport. Me	ethod by which RCRA w	vaste is received (check all that a	pply):			
			Dedicated Pipe				
					6		
11.	Waste Description. © EPA Hazardous Waste		aste number and amount (volume Amount	or mass, speci	ty units). Units		
	EPA Hazaidous vvasti	3 Number	Amount		OTINO		
						_	
						_	
ER	CLA (SUPERFUND)) WASTEWATER, F R, AND OTHER RE	RCRA REMEDIATION/COR MEDIAL ACTIVITY WASTE	RECTIVE WATER:			
12.	Remediation Waste.		orks currently (or has it been notifi		ceive waste fron	n remedial activities	s?
.12.					ceive waste fron	n remedial activities	s?
	Yes (complete F	Does the treatment wo F.13 through F.15.) and the requested inform	orks currently (or has it been notifi No mation (F.13 - F.15.) for each cur	ed that it will) re	site.		
	Yes (complete F	Does the treatment wo F.13 through F.15.) and the requested inform	orks currently (or has it been notifi	ed that it will) re	site.		
.13.	Yes (complete F Provide a list of sites Waste Origin. Descr the next five years).	Does the treatment wo F.13 through F.15.) and the requested informibe the site and type of th	orks currently (or has it been notifi No mation (F.13 - F.15.) for each cur	ed that it will) re rent and future : RA/or other rem	site. edial waste origi	inates (or is expect	ed to originate in
.13.	Yes (complete F Provide a list of sites Waste Origin. Descr the next five years). Pollutants. List the h	Does the treatment wo F.13 through F.15.) and the requested informibe the site and type of th	orks currently (or has it been notifi No mation (F.13 - F.15.) for each cur facility at which the CERCLA/RCI	ed that it will) re rent and future : RA/or other rem	site. edial waste origi	inates (or is expect	ed to originate in
.13.	Yes (complete F Provide a list of sites Waste Origin. Descr the next five years). Pollutants. List the h (Attach additional she	Does the treatment wo F.13 through F.15.) and the requested informibe the site and type of th	orks currently (or has it been notifi No mation (F.13 - F.15.) for each cur facility at which the CERCLA/RCI	ed that it will) re rent and future : RA/or other rem to be received)	site. edial waste origi	inates (or is expect	ed to originate in
∴13.	Yes (complete F Provide a list of sites Waste Origin. Descr the next five years). Pollutants. List the h (Attach additional she	Does the treatment wo F.13 through F.15.) and the requested informable the site and type of t	orks currently (or has it been notifi No mation (F.13 - F.15.) for each cur facility at which the CERCLA/RCI	ed that it will) re rent and future : RA/or other rem to be received)	site. edial waste origi	inates (or is expect	ed to originate in
∵.13. ∵.14.	Yes (complete F Provide a list of sites Waste Origin. Descr the next five years). Pollutants. List the h (Attach additional she Waste Treatment. a. Is this waste treat YesNe	Does the treatment wo F.13 through F.15.) and the requested informable the site and type of t	orks currently (or has it been notifi No mation (F.13 - F.15.) for each cur facility at which the CERCLA/RCI	ed that it will) re rent and future : RA/or other rem to be received)	site. edial waste origi	inates (or is expect	ed to originate in
:.13.	Yes (complete F Provide a list of sites Waste Origin. Descr the next five years). Pollutants. List the h (Attach additional she Waste Treatment. a. Is this waste treat YesNe	Does the treatment wo F.13 through F.15.) and the requested informable the site and type of t	prior to entering the treatment wo	ed that it will) re rent and future : RA/or other rem to be received)	site. edial waste origi	inates (or is expect	ed to originate in
:.13.	Yes (complete F Provide a list of sites Waste Origin. Descr the next five years). Pollutants. List the h (Attach additional she Waste Treatment. a. Is this waste treatYesNo	Does the treatment wo F.13 through F.15.) and the requested information in the site and type of the site and type	prior to entering the treatment wo	ed that it will) re rent and future : RA/or other rem to be received)	site. edial waste origi	inates (or is expect	ed to originate in

2A YOU MUST COMPLETE

North Spring Behavioral Health Center WWTP; VA0067938

Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

- G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)
 - a. All CSO discharge points.
 - Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
 - c. Waters that support threatened and endangered species potentially affected by CSOs.
- **G.2. System Diagram.** Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:
 - a. Locations of major sewer trunk lines, both combined and separate sanitary.
 - b. Locations of points where separate sanitary sewers feed into the combined sewer system.
 - c. Locations of in-line and off-line storage structures.
 - d. Locations of flow-regulating devices.
 - e. Locations of pump stations.

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Complet	e questions G.3 through	G.6 once for each CSO discharge point.		
	scription of Outfall.			
	-			
a.	Outfall number			
b.	Location			
IJ.	Location	(City or town, if applicable)	(Zip Code)	
		(County)	(State)	
		(Latitude)	(Longitude)	
C.	Distance from shore (if a	applicable)	ft.	
d.	Depth below surface (if a	applicable)	ft.	
e.	Which of the following w	ere monitored during the last year for this CS	0?	
	Rainfall	CSO pollutant concentrations	CSO frequency	
	CSO flow volume	Receiving water quality		
f.	How many storm events	were monitored during the last year?		
G.4. CS	O Events.			
a.	Give the number of CSC	events in the last year.		
	events (_ actual or approx.)		
b.	Give the average duration	on per CSO event.		
	hours (actual or approx.)		

FACILITY NAME AND PERMIT NUMBER:

North Spring Behavioral Health Center WWTP; VA0067938

RE	EFE	END OF PART G. ER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.
	De	scribe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or ermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).
G.6.	cs	O Operations.
		United States Geological Survey 8-digit hydrologic cataloging unit code (if known):
	C.	Name of State Management/River Basin:
		United States Soil Conservation Service 14-digit watershed code (if known):
		Name of watershed/river/stream system:
	a.	Name of receiving water:
G.5.	Des	cription of Receiving Waters.
		inches of rainfall
	d.	Give the minimum rainfall that caused a CSO event in the last year.
	٥.	million gallons (actual or approx.)
		Give the average volume per CSO event.

Page 21 of 21

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

All applicants must complete Section A (General Information). 1. 2. Will this facility generate sewage sludge? X Yes No Will this facility derive a material from sewage sludge? Yes X No If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge). Will this facility apply sewage sludge to the land? __Yes _X_No 3. Will sewage sludge from this facility be applied to the land? X Yes No If you answered No to both questions above, skip Section C. If you answered Yes to either, answer the following three questions: Will the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions? __Yes X No Will sewage sludge from this facility be placed in a bag or other container for sale or give-away for b. application to the land? __Yes X_No Will sewage sludge from this facility be sent to another facility for treatment or blending? X Yes No c. If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge). If you answered Yes to a, b or c, skip Section C. 4. Do you own or operate a surface disposal site? Yes X No If Yes, complete Section D (Surface Disposal).

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

Facility	/ Information.
a.	Facility name: North Spring Behavioral Health Center WWTP
b.	Contact person: Dale C. Hammes
	Title: General Manager
	Phone: 571-291-7700
c.	Mailing address: P.O. Box 4000
	Ashburn, VA 20146
d.	Facility location:
	Street or Route #: 42009 Victory Lane
	County: Loudoun
	City or Town: Leesburg State: VA Zip: 20176
e.	Is this facility a Class I sludge management facility?Yes _X_No
f.	Facility design flow rate: mgd
g.	Total population served: approximately 60
h.	Indicate the type of facility:
	X Publicly owned treatment works (POTW)
	Privately owned treatment works
	Federally owned treatment works
	Blending or treatment operation
	Surface disposal site
	Other (describe):
Applic	ant Information. If the applicant is different from the above, provide the following:
a.	Applicant name: Loudoun County Sanitation Authority
b.	Mailing address: P.O. Box 4000
	44865 Loudoun Water Way
	Ashburn, VA 20146
c.	Contact person: Todd Danielson
	Title: Manager of Community Systems
	Phone: 571-291-7835
d.	Is the applicant the owner or operator (or both) of this facility?
	ownerXoperator
e.	Should correspondence regarding this permit be directed to the facility or the applicant? (Check one)
	facility applicant
Dame !4	Information
	Information. Facility's VPDES normit number (if applicable), VA0067039
a.	Facility's VPDES permit number (if applicable): VA0067938 List on this form on a strock most all other follows:
b.	List on this form or an attachment, all other federal, state or local permits or construction approvals received
	or applied for that regulate this facility's sewage sludge management practices:
	Permit Number: Type of Permit:
	<u>none</u>
T., 1*	
Indian	Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this



- 5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:
 - a. Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
 - b. Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.
- 6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.
- 7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? __Yes _X_No If yes, provide the following for each contractor (attach additional pages if necessary).

Name: <u>A&M Septic</u>
Mailing address: <u>P.O. Box 184</u>

Summerduck, Va. 22742

Phone: <u>703-350-1121</u>

Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:

Contractor's License # 2705096806

If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).

8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION	SAMPLE DATE	ANALYTICAL	DETECTION LEVEL
	(mg/kg dry weight)		METHOD	FOR ANALYSIS
Arsenic	<0.05 mg/L	3/18/09	EPA 200.7	0.0500
Cadmium	<0.05 mg/L	3/18/09	EPA 200.7	0.0500
Chromium	0.0595 mg/L	3/18/09	EPA 200.7	0.0500
Copper	7.73 mg/L	3/18/09	EPA 200.7	0.0500
Lead	0.103 mg/L	3/18/09	EPA 200.7	0.0500
Mercury	0.00259 mg/L	3/18/09	EPA 245.2	0.0500
Molybdenum	<0.05 mg/L	3/18/09	EPA 200.7	0.0500
Nickel	0.0552 mg/L	3/18/09	EPA 200.7	0.0500
Selenium	<0.05 mg/L	3/18/09	EPA 200.7	0.0500
Zinc	5.58 mg/L	3/18/09	EPA 200.7	0.0500

9.	Certification. Read and submit the following certification statement with this application. Refer to the instructions to
	determine who is an officer for purposes of this certification. Indicate which parts of the application you have
	completed and are submitting:

Section A (General Information)	
Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage	Sludge)
Section C (Land Application of Bulk Sewage Sludge)	,
Section D (Surface Disposal)	

VPDES PERMIT NUMBER: VA0067938

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title: Dale C. Hammes, General Manager

Signature Wase C Hancus Bate Signed 7/10/09

Telephone number: 571-291-7700

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.



SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1.		ant Generated On Site. dry metric tons per 365-day period generated at your facility: ~1 dry metric tons
2.	dispo	ant Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or sal, provide the following information for each facility from which sewage sludge is received. If you receive the sludge from more than one facility, attach additional pages as necessary. Facility name: N/A Contact Person: Title: Phone ()
	c.	Mailing address: Street or P.O. Box: City or Town: State: Zip:
	d.	Facility Address: (not P.O. Box)
	e. f.	Total dry metric tons per 365-day period received from this facility: dry metric tons Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:
3.	Treat	ment Provided at Your Facility: N/A
٠.	a.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class AClass BX_Neither or unknown
	b.	Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:
	c.	Which vector attraction reduction option is met for the sewage sludge at your facility? Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration) Option 4 (Specific oxygen uptake rate for aerobically digested sludge) Option 5 (Aerobic processes plus raised temperature) Option 6 (Raise pH to 12 and retain at 11.5) Option 7 (75 percent solids with no unstabilized solids) Option 8 (90 percent solids with unstabilized solids) None or unknown
	d.	Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:
	e.	Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above:
4.	One o	ration of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and of Vector Attraction Reduction Options 1-8 (EQ Sludge). N/A rage sludge from your facility does not meet all of these criteria, skip Question 4.) Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land: dry metric tons Is sewage sludge subject to this section placed in bags or other containers for sale or give-away? YesNo

Sale or Give-Away in a Bag or Other Container for Application to the Land.

5.

VPDES PERMIT NUMBER: VA0067938

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

- Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility a. for sale or give-away for application to the land:_____ dry metric tons
- Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or b. given away in a bag or other container for application to the land.
- 6. Shipment Off Site for Treatment or Blending.

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question

		ectly to a land application or surface disposal site. Skip this question if the sewage sludge is				
covere		sewage sludge to more than one facility, attach additional sheets as necessary.)				
a.	Receiving facility name:					
b.	Facility contact:	Robert Canham				
	Title:	Plant Manager				
	Phone:	571-291-7823				
c.	Mailing address:	P. O. Box 4000				
		Ashburn, Va. 20146				
d.	Total dry metric tons per metric tons	365-day period of sewage sludge provided to receiving facility: dry				
e.		tachment, the receiving facility's VPDES permit number as well as the numbers of local permits that regulate the receiving facility's sewage sludge use or disposal				
	Permit Number:	Type of Permit:				
	VA0091383	VPDES				
		· · · · · · · · · · · · · · · · · · ·				
f.	facility? X Yes No Which class of pathogen Class A Describe, on this form or	reduction is achieved for the sewage sludge at the receiving facility? X Class B Neither or unknown another sheet of paper, any treatment processes used at the receiving facility to age sludge: anaerobic digestion, 38% volatile reduction 95F 40 d retention				
g.	sewage sludge? X Yes Which vector attraction re X Option 1 (Minimum Option 2 (Anaerobic pro Option 3 (Aerobic pro Option 4 (Specific ox Option 5 (Aerobic pro Option 6 (Raise pH to	eduction option is met for the sewage sludge at the receiving facility? 38 percent reduction in volatile solids) process, with bench-scale demonstration) ocess, with bench-scale demonstration) rygen uptake rate for aerobically digested sludge) ocesses plus raised temperature) o 12 and retain at 11.5)				
	Option 7 (75 percent solids with no unstabilized solids)Option 8 (90 percent solids with unstabilized solids)					
	None unknown					
		another sheet of paper, any treatment processes used at the receiving facility to properties of sewage sludge:				
h.	Does the receiving facility Yes X_No	y provide any additional treatment or blending not identified in f or g above?				

If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:

- i. If you answered yes to f., g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.
- j Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or giveaway for application to the land? ___Yes _X_No If yes, provide a copy of all labels or notices that accompany the product being sold or given away.

FACILITY NAME: North Spring Behavioral Health Center WWTP **VPDES PERMIT NUMBER: VA0067938** Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? X Yes No. If no, provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility. Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported. From North Spring WTP take right onto Route 15 East and merge onto Route 7 East. Turn right onto Loudoun County Parkway, then take left onto the access road for the Septage Receiving Area at the Broad Run Water Reclamation Facility. 7. Land Application of Bulk Sewage Sludge. N/A (Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6; complete Question 7.b, c & d only if you are responsible for land application of sewage sludge,) Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: dry metric tons Do you identify all land application sites in Section C of this application? Yes No b. If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions). Are any land application sites located in States other than Virginia? ___Yes ___No c. If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification. Attach a copy of any information you provide to the owner or lease holder of the land application sites to d. comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV). 8. Surface Disposal. N/A (Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.) Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: dry metric tons b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal? __Yes ___No If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary. Site name or number: c. Contact person: d. Title: Phone: () Contact is: __Site Owner __Site operator Mailing address. e. Street or P.O. Box: State: Zip: City or Town: Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal f. _ dry metric tons List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of g. all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site: Permit Number: Type of Permit: 9. Incineration. N/A (Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)

- a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: ______ dry metric tons

If no, answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.

c. Incinerator name or number:

VPDES PERMIT NUMBER: VA0067938

	d.	Contact person:
		Title:
		Phone: () Contact is:Incinerator OwnerIncinerator Operator
	e.	Mailing address.
	C.	Street or P.O. Box:
		City or Town: State: Zip:
	f.	Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge
	1.	incinerator: dry metric tons
	~	List on this form or an attachment the numbers of all other federal, state or local permits that regulate the
	g.	
		firing of sewage sludge at this incinerator:
		Permit Number: Type of Permit:
10.	Dienos	sal in a Municipal Solid Waste Landfill. N/A
10.	_	ete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information
		nunicipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one
		oal solid waste landfill, attach additional pages as necessary.)
	a.	Landfill name:
	b.	Contact person:
	٠.	Title:
		Phone: ()
		Contact is: Landfill Owner Landfill Operator
	c.	Mailing address.
	٠.	Street or P.O. Box:
		City or Town: State: Zip:
	d.	Landfill location.
	u.	Street or Route #:
		County:
		City or Town: State: Zip:
	e.	Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:
	٥.	dry metric tons
	f.	List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the
	••	operation of this municipal solid waste landfill:
		Permit Number: Type of Permit:
		1 time realises 1 to 1 t
	g.	Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9
		VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?
		YesNo
	h.	Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid
		Waste Management Regulation, 9 VAC 20-80-10 et seq.?YesNo
	i.	Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill
		be watertight and covered? Yes No
		Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the
		week and time of the day sewage sludge will be transported.
		•

SECTION C. LAND APPLICATION OF BULK SEWAGE SLUDGE

N/A

Complete this section for sewage sludge that is land applied unless any of the following conditions apply:

The sewage sludge meets the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements and one of the vector attraction reduction options 1-8 (fill out B.4 instead) (EQ Sludge); or

The sewage sludge is sold or given away in a bag or other container for application to the land (fill out B.5 instead); or

You provide the sewage sludge to another facility for treatment or blending (fill out B.6 instead).

Complete Section C for every site on which the sewage sludge that you reported in B.7 is land applied.

1.	Identi	fication of Land Application Site.			
	a.	Site name or number:			
	b.	Site location (Complete i and ii)			
		i. Street or Route#:			
		County:			
		City or Town: State: Zip:			
		City or Town: State: Zip: ii. Latitude: Longitude:			
		Method of latitude/longitude determination			
		USGS map Filed survey Other			
	c.	USGS map Filed survey Other Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.			
2.	Owne	er Information.			
	a.	Are you the owner of this land application site?YesNo			
	b.	If no, provide the following information about the owner:			
		Name:			
		Street or P.O. Box:			
		City or Town: State: Zip:			
		Phone: ()			
3.	Applier Information:				
	a.	Are you the person who applies, or who is responsible for application of, sewage sludge to this land			
		application site?YesNo			
	b.	If no, provide the following information for the person who applies the sewage sludge:			
		Name:			
		Street or P.O. Box:			
		City or Town: State: Zip:			
		Phone: ()			
	c.	List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the person			
		who applies sewage sludge to this land application site:			
		<u>Permit Number:</u> <u>Type of Permit:</u>			
4.	Site 7	Type. Identify the type of land application site from among the following:			
	A	gricultural landReclamation siteForest ublic contact siteOther. Describe			
	Pt	blic contact siteOther. Describe			
5.		or Attraction Reduction.			
		ny vector attraction reduction requirements met when sewage sludge is applied to the land application site?			
		YesNo If yes, answer a and b.			
	a.	Indicate which vector attraction reduction option is met:			
		Option 9 (Injection below land surface)			
		Option 10 (Incorporation into soil within 6 hours)			
	b.	Describe, on this form or on another sheet of paper, any treatment processes used at the land application site			
		to reduce the vector attraction properties of sewage sludge:			

VPDES PERMIT NUMBER: VA0067938

Cumulative Loadings and Remaining Allotments.

	e Question 6 only if the sewage sludge applied to this site since July 20, 1993 is subject to the cumulative pollutant loading rates - see instructions.)
a.	Have you contacted DEQ or the permitting authority in the state where the sewage sludge subject to the CPLRs will be applied to ascertain whether bulk sewage sludge subject to the CPLRs has been applied to this site since July 20, 1993?YesNo If no, sewage sludge subject to the CPLRs may not be applied to this site. If yes, provide the following information: Permitting authority: Contact person:
b.	Phone:() Based upon this inquiry, has bulk sewage sludge subject to the CPLRs been applied to this site since July 20, 1993?YesNo If no, skip the rest of Question 6. If yes, answer questions c - e.
c.	Site size, in hectares: (one hectare = 2.471 acres) Provide the following information for every facility other than yours that is sending or has sent sewage
d.	sludge subject to the CPLRs to this site since July 20, 1993. If more than one such facility sends sewage sludge to this site, attach additional pages as necessary. Facility name: Facility contact: Title: Phone: () Mailing address. Street or P.O. Box: City or Town: State: Zip:
e.	Provide the total loading and allotment remaining, in kg/hectare, for each of the following pollutants: Cumulative loading Allotment remaining Cadmium Allotment remaining
	Copper
	Lead
	Mercury
	Nickel
	Selenium
	Zinc

Complete Questions 7-12 below only if you apply sewage sludge, or you are responsible for land application of sewage sludge. Information required by these questions may be prepared as attachments to this form. Skip the following questions if you contract land application to someone else (as indicated under Section A.7) who is responsible for the operation.

7. Sludge Characterization. Use the table below or a separate attachment, provide at least one analysis for each parameter.

> pH (S. U.) Percent Solids (%) Ammonium Nitrogen (mg/kg) Nitrate Nitrogen (mg/kg) Total Kjeldahl Nitrogen (mg/kg) Total Phosphorus (mg/kg)

PCBs (mg/kg)

Total Potassium (mg/kg)

Alkalinity as CaCO₃* (mg/kg)

Lime treated sludge (10% or more lime by dry weight) should be analyzed for percent CaCO₃.

8. Storage Requirements.

Existing and proposed sludge storage facilities must provide an estimated annual sludge balance on a monthly basis incorporating such factors as storage capacity, sludge production and land application schedule. Include pertinent calculations justifying storage requirements.

Proposed sludge storage facilities must also provide the following information:

- a. A sludge storage site layout on a 7.5 minute topographic quadrangle or other appropriate scaled map to show the following topographic features of the surrounding landscape to a distance of 0.25 mile. Clearly mark the property line.
 - 1) Water wells, abandoned or operating
 - 2) Surface waters
 - 3) Springs
 - 4) Public water supply(s)
 - 5) Sinkholes
 - 6) Underground and/or surface mines
 - 7) Mine pool (or other) surface water discharge points
 - 8) Mining spoil piles and mine dumps
 - 9) Quarry(s)
 - 10) Sand and gravel pits
 - 11) Gas and oil wells
 - 12) Diversion ditch(s)
 - 13) Agricultural drainage ditch(s)
 - 14) Occupied dwellings, including industrial and commercial establishments
 - 15) Landfills or dumps
 - 16) Other unlined impoundments
 - 17) Septic tanks and drainfields
 - 18) Injection wells
 - 19) Rock outcrops
- b. A topographic map of sufficient detail to clearly show the following information:
 - 1) Maximum and minimum percent slopes
 - 2) Depressions on the site that may collect water
 - 3) Drainageways that may attribute to rainfall run-on to or runoff from this site
 - 4) Portions of the site (if any) which are located with the 100-year floodplain and how the storage facility will be protected from flooding
- c. Data and specifications for the storage facility lining material.
- d. Plan and cross-sectional views of the storage facility.
- e. Depth from the bottom of the storage facility to the seasonal high water table and separation distance to the permanent water table.
- 9. Land Area Requirements. Provide calculations justifying the land area requirements for land application of sewage sludge taking into consideration average soil productivity group, crop(s) to be grown and most limiting factor(s) of the sewage sludge, specifically Plant Available Nitrogen (PAN), Calcium Carbonate Equivalence (CCE), and metal loadings (CPLR sewage sludge only), where applicable. Relate PAN, CCE, and metal loadings to demonstrate the most limiting factor for land application.
- 10. Landowner Agreement Forms. Provide a properly completed Sewage Sludge Application Agreement Form (attached) for each landowner if sewage sludge is to be applied onto land not owned by the applicant.
- 11. Ground Water Monitoring.

 Are any ground water monitoring data available for this land application site? ___Yes ___No

 If yes, submit the ground water monitoring data with this permit application. Also submit a written description of the well locations, approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.
- 12. Land Application Site Information.

(Complete Items a-d for sites receiving infrequent application - land application of sewage sludge up to the agronomic rate at a frequency of once in a 3 year period; complete Items a-h for sites receiving frequent application - land application of sewage sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year period)

- Provide a general location map for each county which clearly indicates the location of all the land application sites.
- b. For each land application site provide a site plan of sufficient detail to clearly show the concerned landscape features and associated buffer zones (See instructions). Provide a legend for each landscape feature and the net acreage for each field taking into account the proposed buffer zones.
- In order to ensure that land application of bulk sewage sludge will not impact federally listed threatened or endangered species or federally designated critical habitat, the applicant must notify the field office of the U.
 S. Department of the Interior, Fish and Wildlife Service (FWS), by a letter, the proposed land application activities with the identification of the land application sites. The address and phone number of FWS are provided below.

U. S. Fish and Wildlife Service Virginia Field Office P. O. Box 480 White Marsh, VA 23183 TEL: (804)693-6694

Provide a copy of the notification letter with this application form.

d. Provide a soil survey map, preferably photographically based, with the field boundaries clearly marked. (A USDA-SCS soil survey map should be provided, if available.)

Provide a detailed legend for each soil survey map which uses accepted USDA-SCS descriptions of the typifying pedon for each soil series (soil type). Complex associations may be described as a range of characteristics. Soil descriptions shall include as a minimum the following information.

- 1) Soil symbol
- 2) Soil series, textural phase and slope range
- 3) Depth to seasonal high water table
- 4) Depth to bedrock
- 5) Estimated soil productivity group (for the proposed crop rotation)

Item e - h are required for sites receiving frequent application of sewage sludge

- e. In order to verify the information provided in item d, characterize the soil at each land application site. Representative soil borings or test pits to a depth of five feet or to bedrock if shallower, are to be coordinated for the typifying pedon of each soil series (soil type). Soil descriptions shall include as a minimum the following information:
 - 1). Soil symbol
 - 2). Soil series, textural phase and slope range
 - 3). Depth to seasonal high water table
 - 4). Depth to bedrock
 - 5). Estimated soil productivity group (for the proposed crop rotation)

f. Collect and analyze soil samples from each field, weighted to best represent each of the soil borings performed for Item e. Using the table below or a separate attachment, provide at least one analysis per sample for each of the following parameters.

Soil Organic Matter (%)

Soil pH (std. units)

Cation Exchange Capacity (meq/100g)

Total Nitrogen (ppm)

Organic Nitrogen (ppm)

Ammonia Nitrogen (ppm)

Nitrate Nitrogen (ppm)

Available Phosphorus (ppm)

Exchangeable Potassium (mg/100g)

Exchangeable Sodium (mg/100g)

Exchangeable Calcium (mg/100g)

Exchangeable Magnesium (mg/100g)

Arsenic (ppm)

Cadmium (ppm)

Copper (ppm)

Lead (ppm)

Mercury (ppm)

Molybdenum (ppm)

Morybuchum (ppn

Nickel (ppm)

Selenium (ppm)

Zinc (ppm)

Manganese (ppm)

Particle Size Analysis or

USDA Textural Estimate (%)

- g. Relate the crop nutrient needs to anticipated yields, soil productivity rating and the various fertilizer or nutrient sources from sludge and chemical fertilizers. Describe any specialized agronomic management practices which may be required as a result of high soil pH. If the sludge is expected to possess an unusually high CCE or other unusual properties, provide a description of any plant tissue testing, supplemental fertilization or intensive agronomic management practices which may be necessary.
- h. Using a narrative format and referencing any related charts, describe the proposed cropping system. Show how the crop rotation and management will be coordinated with the design of the land application system. Include any supplemental fertilization program, soil testing and the coordination of tillage practices, planting and harvesting schedules and timing of land application.

VPDE ERMIT NUMBER: VA0067938

SEWAGE SLUDGE APPLICATION AGREEMENT

This s	sewage sludge application agreement is made on this date	ebetween,		
referr	red to here as "landowner", and	, referred to here as the "Permittee".		
	owner is the owner of agricultural land shown on the ma ("landowner's land").	p attached as Exhibit A and designated there as Permittee agrees to apply and landowner agrees to comply with ludge on landowner's land in amounts and in a manner authorized		
certai by VI	on permit requirements following application of sewage septembers which is held	ludge on landowner's land in amounts and in a manner authorized by the Permittee.		
condi	itioning to the property. Moreover, landowner acknowled the health, the following site restrictions must be adhered to	sewage sludge will be beneficial in providing fertilizer and soil edges having been expressly advised that, in order to protect o when sewage sludge receives Class B treatment for pathogen		
1.	Food crops with harvested parts that touch the sewag not be harvested for 14 months after application of se	e sludge/soil mixture and are totally above the land surface shall ewage sludge;		
2.		the land shall not be harvested for 20 months after application of the land surface for four months or longer prior to incorporation		
3.		the land shall not be harvested for 38 months after application of the land surface for less than four months prior to incorporation		
4.	Food crops, feed crops, and fiber crops shall not be h	arvested for 30 days after application of sewage sludge;		
5.	Animals shall not be grazed on the land for 30 days a	after application of sewage sludge;		
6.	Turf grown on land where sewage sludge is applied shall not be harvested for one year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the State Water Control Board;			
7.	Public access to land with a high potential for public exposure shall be restricted for one year after application of sewage sludge;			
8.	Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.			
9.	Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of sewage sludge borne cadmium equal to or exceeding 0.5 kilograms/hectare (0.45 pounds/acre).			
speci		of the proposed schedule for sewage sludge application and land. This agreement may be terminated by either party upon		
	Landowner:	Permittee:		
	Signature	Signature		
	Mailing Address	Mailing Address		

SECTION D. SURFACE DISPOSAL

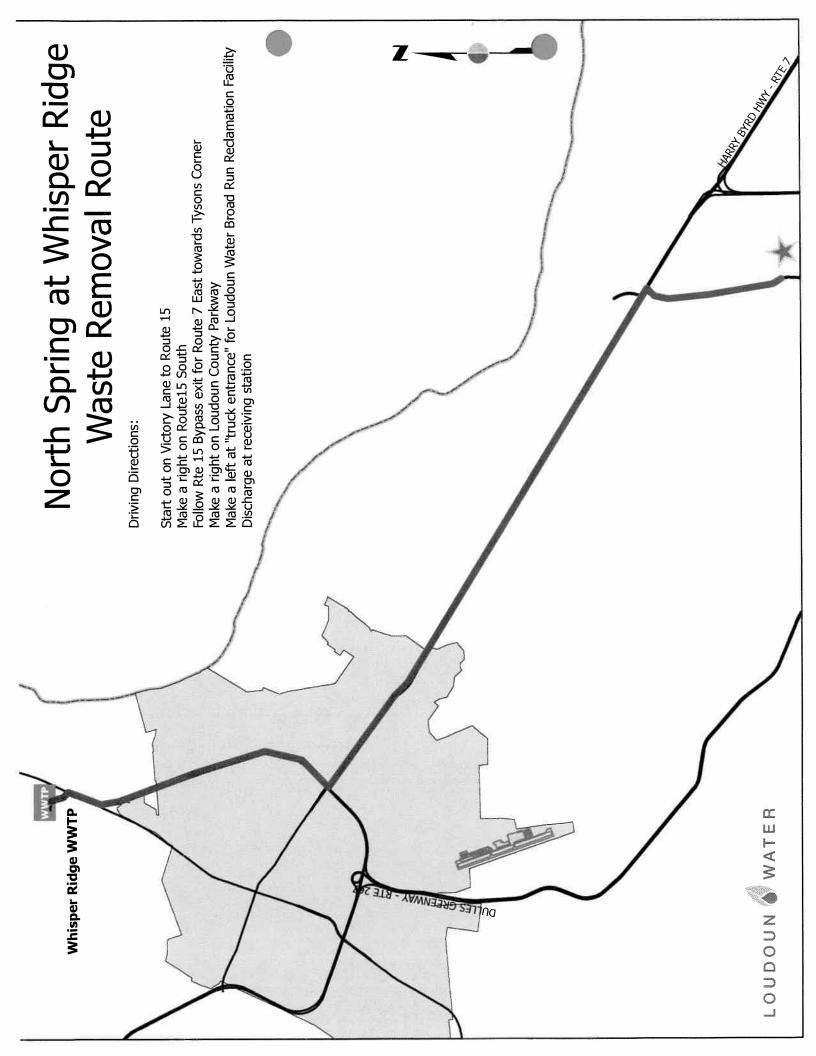
N/A

Complete this section only if you own or operate a surface disposal site. Provide the information for each active sewage sludge unit.

1.	Inform	nation on Active Sewage Sludge Units.					
	a.	Unit name or number:					
	b.	Unit location					
		i. Street or Route#:					
		County:					
		City or Town: State: Zip: ii. Latitude: Longitude:					
		ii. Latitude: Longitude:					
		Method of latitude/longitude determination					
		USGS map Filed survey Other					
	c.	Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.					
	d.	Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period:dry metric tons.					
	e.	Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit: dry metric tons.					
	f.	Does the active sewage sludge unit have a liner with a minimum hydraulic conductivity of 1 x 10 ⁻⁷ cm/sec?YesNo If yes, describe the liner or attach a description.					
	g.	Does the active sewage sludge unit have a leachate collection system?YesNo If yes, describe the leachate collection system or attach a description. Also, describe the method used for leachate disposal and provide the numbers of any federal, state or local permits for leachate disposal:					
	h.	If you answered no to either f or g, answer the following: Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?YesNo If yes, provide the actual distance in meters:					
	i.	Remaining capacity of active sewage sludge unit, in dry metric tons: dry metric tons Anticipated closure date for active sewage sludge unit, if known: (MM/DD/YYYY) Provide with this application a copy of any closure plan developed for this active sewage sludge unit.					
2.	Sewag	Sewage Sludge from Other Facilities. Is sewage sludge sent to this active sewage sludge unit from any facilities other than yours?YesNo					
		provide the following information for each such facility, attach additional sheets as necessary.					
	a.	Facility name:					
	b.	Facility contact:					
		Title:					
		Phone: ()					
	c.	Mailing address.					
		Street or P.O. Box:					
		City or Town:State:Zip:					
	d.	List, on this form or an attachment, the facility's VPDES permit number as well as the numbers of all other					
		federal, state or local permits that regulate the facility's sewage sludge management practices: Permit Number: Type of Permit:					
	e.	Which class of pathogen reduction is achieved before sewage sludge leaves the other facility? Class AClass BNeither or unknown					
	f.	Describe, on this form or on another sheet of paper, any treatment processes used at the other facility to reduce pathogens in sewage sludge:					

VPDE. ZERMIT NUMBER: VA0067938

	g.	Which vector attraction reduction option is achieved before sewage sludge leaves the other facility? Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration) Option 4 (Specific oxygen uptake rate for aerobically digested sludge) Option 5 (Aerobic processes plus raised temperature) Option 6 (Raise pH to 12 and retain at 11.5) Option 7 (75 percent solids with no unstabilized solids) Option 8 (90 percent solids with unstabilized solids)
	h.	None or unknown Describe, on this form or another sheet of paper, any treatment processes used at the other facility to reduce vector attraction properties of sewage sludge:
	i.	Describe, on this form or another sheet of paper, any other sewage sludge treatment activities performed by the other facility that are not identified in e - h above:
3.	Vecto	or Attraction Reduction.
	a.	Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit? Option 9 (Injection below land surface) Option 10 (Incorporation into soil within 6 hours) Option 11 (Covering active sewage sludge unit daily)
	b.	Describe, on this form or another sheet of paper, any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge:
4.	Grou	nd Water Monitoring.
	a.	Is ground water monitoring currently conducted at this active sewage sludge unit or are ground water monitoring data otherwise available for this active sewage sludge unit?YesNo If yes, provide a copy of available ground water monitoring data. Also provide a written description of the well locations, the approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.
	b.	Has a ground water monitoring program been prepared for this active sewage sludge unit? YesNo If yes, submit a copy of the ground water monitoring program with this application.
	c.	Have you obtained a certification from a qualified ground water scientist that the aquifer below the active sewage sludge unit has not been contaminated?YesNo If yes, submit a copy of the certification with this application.
5.	Are y	Specific Limits. ou seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit? esNo If yes, submit information to support the request for site-specific pollutant limits with this application.



PUBLIC NOTICE BILLING INFORMATION

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice I hereby authorize the Department of Environmental Quality to nave the cost of published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290.C.2.

Agent/Department to be billed:	Todd Danielson
Owner:	Loudoun Water
Applicant's Address:	PO Box 4000
	Ashburn VA 20146
Agent's Telephone Number:	571-291-7835
Authorizing Agent:	Millim)
	Signature

VPDES Permit No. VA0067938 North Spring Behavioral Health Center

Please return to:

Alison Thompson VA-DEQ, NRO 13901 Crown Court Woodbridge, VA 22193-1453

Fax: (703)583-3841